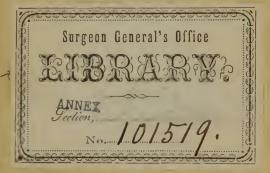


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# A SHORT GUIDE

FOR THE

Rational Creatment of Children.



## SHORT GUIDE

FOR THE

RATIONAL TREATMENT OF CHILDREN,

IN

Realth and Disease,

BY WATER.

c. c. schieferdecker, M. D.,

MEMBER OF DIFFERENT SOCIETIES FOR THE PROMOTION OF HYGIENE IN EUROPE
AND AMERICA, DIRECTOR OF SCHIEFERDECKER'S WATER-CURE PLACE,
WILLOW GROVE, MONTGOMERY CO., PENNSYLVANIA......

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## COL. J. M. MCCARTY.

#### DEAR SIR:

Permit me to dedicate to you this small book of mine, with the full conviction that, true and sacred as Priessnitz's system of curing diseases is, it will gain great weight by an association with the name of one, so much its friend and patron.

The benefit which you yourself, ruined as your body was by the drug-guild, have derived from the water-cure, will be a signal proof of its value.

May you be long spared to support and spread, with that distinguished eminence which is so much the admiration of all who know you, the truth of a system, destined to be the redeeming means of diseased humanity.

I have the honor to be,

Dear Sir,

Your most obedient servant,

C. C. SCHIEFERDECKER, M. D.

WILLOW GROVE, November, 1851.



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### PREFACE.

A coop book needs no apology, and faults are not mended by fine words. I shall therefore make no comments on the text of this work on Water-Cure, but devote a few introductory pages to a general statement of the aims to be kept in view in all the influences we exert or bring to bear on children, so as to secure to them a healthy development,—the sound mind in the sound body.

We boast the human organism as the highest on the Earth. Children, then, in their growth to men and women, should exhibit a vigor, frankness and beauty, at least equal to that of a rose, a cactus or pine tree, a deer, a horse, an eagle, or a mocking-bird, which, though so far below man in their capacities, yet more perfect of their kind, much oftener present examples of nature's successful attainment.

One day when I was ill and much depressed, I saw at a friend's house a magnificent cactus, full of buds, and opening flower after flower in gorgeous profusion. I drew near to admire the matchless crimson that flashed and glowed and burned in its deep cups, and the silken anthers that reposed in their luxury. I was fain to worship at the shrine of that flower, and it interpreted for me Christ's saying:—"If ye have faith

even as a grain of mustard-seed, ye shall say unto this mountain, remove hence to yonder place, and it shall remove, and nothing shall be impossible to you."—"For the mustard indeed is one of the least of seeds, but when it is grown, it is the greatest among herbs and becometh a tree, so that the birds of heaven come and lodge in the branches thereof."

Here was this cactus, like myself, a stranger in a far country, alone of its family; its heritage of the mountain-side exchanged for a tub of earth, and the Mexican sunshine for the pale light of a northern. parlor, yet blooming out as though it were the very summit and flower of all-being, as if all things existed for it and it for all. What beautiful self-trust! Here are no doleful metaphysics of original sin, no fretting at circumstances, no self-torture and repentances again to be repented of. If I might interpret the voice of its being, it seems to say:-"I am a cactus, endowed with the organic forces, virtues, rights and enjoyments of a cactus. In my individual being, growth, development and production, I honor God, filling the place which his all-conscious soul assigns to me in nature. I make my flowers the temples of his glorious presence, and in my eloquent silence is heard the universal word of nature, uttered also for man by him who has said: 'I and my Father are one!' From him I joy to hold my life, nor seek for duties outwardly, since 'beauty is the best excuse for being.' Am I not wholly such as I am made, and my life such as it is given? why then should I load myself with sullen cares and vain responsibilities? 'He doeth all things well.' These attractions that

urge my sap through capillary pores, or fix its globules in the leaves or flowers or spines, they are to nourish, giving to each wise choice of its appropriate aliments, and those still finer coves of pistil and of stamens whose concurrence form my seed—I have not calculated these or bestowed them on myself; it is the Father of life that inspires them all, he deigns to live in me as in all his creatures, and not least in thee, whom 'he hath made a little lower than the angels.'"

Now then, I thought, why not believe thus in myself, in the all-loving God, in the all-sufficing forces which he breathes through Nature? Why not assert myself as truly in my type of organization as the cactus in its vegetative life? and in that self-assertion to become radiant of blessing to all who approach me. Surely God who inspires the life of the plant below me, and the harmonious movement of the stars above me, has not forgotten or disowned myself, also the child of his intelligence and love!—Answer again, O cactus, since to the Almighty God, flower or angel are ministers alike, and Mediation died not on Mount Calvary.

Considering farther, I perceived indeed the living truth of that organic faith and self-trust in the plant, which becomes in man "the peace surpassing all understanding, and the faith which moveth mountains," which in respect of the organic life is health, to the senses beauty, to the affections loveliness, to the intellect truth and perfect order; which, to the individual possessing it, is happiness; to the society which profits by it, virtue; and to God who inspires it obedience.

But I saw also how this internal state was sustained by correspondent external harmonies. I examined the soil where the plant grew, it was but a tub full, but it was in due proportions, loam and gravel, such as the cactus specifically requires. The atmosphere also here had the same proportions of oxygen, hydrogen and carbonic acid, as that of Mexico, whence the parent-plant was brought. Its temperature was kept at a mild summer-heat; nor, however apparently limited, was any external element or circumstance deficient, but a true correspondence existed between the essential life of the plant and the sphere in which it was developed.

What then are the external correspondences necessary to my life, to human life, by which it can develope itself according to its own law or type of being, as the cactus according to its own vegetative law and type?

The cactus sustains harmonious relations:

- 1. Elementary, with the air and the waters;
- 2. Mineral, in its secretions from the soil, and
- 3. Solar, with the heat, light and electrical activity of the solar ray, exciting its germination and all the processes of its growth and evolution, communicating to it that vegetative energy which secretes from the soil, air and water the elements which it requires.

In its natural site we should probably find other relations with various plants, animals and insects, useful to it and served by it, but which, as appears from its isolated life, are not indispensable.

These harmonies, for a human infant, if we study the law of its development, must be vastly extended and all

of them serve but as the prelude to a higher class of relations, the human and social, the spiritual and divine.

To obtain a fair parallel we must besides have in the first place a child well born; an immense concession, since it demands exemption from hereditary diseases, sound health in the parents, their mutual fitness in a true marriage of souls as well as bodies, and catenation of favourable influences over its conception and gestation, which few individuals have either the wisdom or the opportunity to realize, since, when we advance from plants and beasts to the more complex conditions of human life, these matters require social combinations and intelligent calculations, to which hardly any society, characterized, as our own, by religious fanaticism or infidelity, by industrial competition, the separation and hostility of interests, has attained or can attain.

Every child is the concrete history of his ancestors, and its life, whose essence God inspires for all, is in its form or character phenomenal,—

- 1. Of the spherical and humanitary conditions which have modified its organization;
- 2. Of the influences of birth, education, social grade and circumstances generally in which it is reared.

Leaving the deeper problems of spherical and social influence as beyond the limits of our present study, let us take the child as it comes into our hands, and its destiny for good or evil, for health or disease, for weal or for woe is entrusted to us. It is a talent which we are expected to restore with interest. Let

us understand where our province commences, and distinguish our duties.

We receive from God the earth and the seas, the surface at least of the planet, on which we live; but only a small part of this is prepared as a cradle or nursery for the human race, like the natural rose-bowers and peach-orchards of Persia, or the eternal spring of tropical table lands, or the South Sea Island groves of banana and cocoa-nut, where rich and tender Nature "satisfies man's mouth with good, and renews his youth like the eagle's."

The earth affords only the crude germs which our own energy and skill, developed through our wants and sufferings which call them into action, must cultivate and refine.

There are metallic ores and earths provided, but God leaves it to man to smelt and refine them, to manufacture knives, saws and axes, to set and polish jewelry, to make glass mirrors and lenses.

There are wild grains and forest fruits provided, but it is for the toil and skill of the husbandman and gardener to bring forth the large nutritious and highly flavored fruits, vegetables and grains, or the choice flowers of our parterres.

There are many animals fitted for the service of man—horses and wild cattle, dogs, birds, &c., some of which he has already succeeded in domesticating; others, as the zebra, ostrich, buffalo, elk, &c., whose uses are reserved for the societies of the future; but these must all be trained, educated for the functions desired of them, their races gradually developed into new species and varieties of breed, and their organ-

izations and instincts modified in relation to these functions, until, as in the case of the setter or pointer which will sometimes go through all the desired evolutions the first time he follows the sportsman, of the Durham or other fine milch-cows, or the highly bred racer, they seem to be even in their instincts results almost equally of human and of divine intelligence.

But the choicest germ thus entrusted to our human providence is man himself, the infant, in whose fresh generations humanity continues to live, whilst the transformations of our individual lives are concealed by the shroud of the grave. And this infant, it is also an ore, a wild flower, a crab-apple, an animal with untutored instincts, a spirit clothed in strange garments of matter, which asks of us in the name of our Heavenly Father who sent it here, to assist it in developing a body in which it may fitly and truly express itself, so that its life may praise God and bless its fellow-creatures and joy in reciprocated love.

First, shall the baby live or die? Be not too hasty to say, it shall live, for a very large proportion of the children which are born, perish ere they have counted three summers. Thousands in the close, and rank civilization of the East are yearly sacrificed by their own parents, who send them to another world because they are unable to provide for them in this. Still nearer home, the muddy waters of the Thames and the grave-yards of London, of Edinburgh, of Boston, of New York and Philadelphia, disclose the same sad secrets. The offerings, made by those Pagan nations who sacrifice human victims and cause their "first-born to pass through the fire." necessity con-

tinues among the civilized heathen idolaters of Mammon; and those immolations, consecrated by Indian superstition, recur amid the industrial competition of Europe, as in China, bared of all illusion, as mere results of destitution and degradation, of social improvidence, of the crushing of class by class, of the weaker by the stronger in our life-scramble.

With us the cases are yet comparatively few where the parents are intentionally guilty of the death of their own offspring. Ignorance of health conditions, mistaken fondness with its over-feeding and overclothing, improper food, close rooms, filthiness and drugging do the rest.

Let us now consider the natural relations between the child and the external world, of whose harmony its health, happiness and virtue are as truly expressive, as by the rescarches of Lamarck and Geoffroi St. Hilaire it is seen that each type of vegetative or animal life on the earth has been the modified result of the spherical influences preceding and accompanying it, and that "all changes at the surface of the earth have been connected with a variation pre-existing, slow and continuous, of the different and consecutive surrounding media." The spheres or media in which we live, observed from the subjective point of view, take from human nature their terms of classification, and we may distinguish in them objects of the senses, objects of the affections, and objects of the intellect. Yet as many objects come at once under all these heads in their different relations with us, it is more convenient to adopt that point of view which St. Pierre has chosen in his admirable chapters on natural harmonies,

the 10th, 11th, and 12th of his Studies of Nature. He classes them as *Elementary*, *Vegetable*, *Animal*, and *Human*, to which we may add the term *Divine*, as completing and resuming in itself the Natural Series.

The first elementary relation which the child contracts on entering the world, is with the atmosphere. Its lungs, inactive during fætal life, now find their proper stimulus, and transmit through the filmy membranes which divide their air-cells from the ramifications of the pulmonary artery, the oxygen absorbed by the blood and carried in the general circulation to the various tissues of the body to effect there the transformations necessary to their growth and activity. The baby's lusty cries seem to say that he finds the world rather a rough customer, and perchance may some day return it the compliment.

This atmosphere whose chemical constitution does not apparently differ from the equator to the poles, in the Simoom or the North-wester, is a mixture of azote, oxygen, and carbonic acid gas in definite proportions. In a state of purity it holds that precise relation to the blood and lung-tissue of warm-blooded animals, essential to the respiratory harmony, a principal element of that integral health which results from the combined harmonics of all the organs and apparatus composing our organic system. A slight change in the composition of this atmosphere, as the subtraction of a little oxygen, the addition of a little carbonic acid, such as probably existed in those remote periods when immense coal-formations were produced by a primitive vegetation, would suffice to destroy man

and most of the present animals, permitting only some more rudimental or inferior organisms. Temporary changes of this character gravely compromise our health, as we perceive when they are effected even for an hour in a close and crowded room where every one who breathes, subtracts from the air of the apartment a proportion of its oxygen at every respiration, and imparts to it an additional proportion of carbonic acid.

Other causes of impurity are the effluvia from animal bodies even in health, much more when diseased, and most pernicious when diseased of a contagious or a putrid character, as small-pox, typhus fever, &c.

All these exist permanently in a more or less diluted state in the atmosphere of cities, and chiefly in those foul reeking alleys and rotten piles of buildings in which thousands of poor families are huddled. When we enter the houses themselves, the evil is more concentrated, since there are no facilities for proper ventilation; and even when the weather is favorable, a pernicious prejudice keeps the windows closed for fear of taking cold.

A great number of children, both rich and poor, are poisoned slowly by bad air and close rooms, and perish of various diseases excited by such treatment, which proceeds from the general ignorance and neglect of this first and simplest of our elementary relations. I have seen a child actually in convulsions from this cause, and relieved at once by opening the window and allowing it to breathe. It is not to the heat, as is generally supposed, but to the exhaustion of oxygen gas and excess of carbonic acid in the

air, that we are to ascribe the faintings, the heaviness and stupor which occur in crowded churches and lecture-rooms. Those employed in this country for medical lectures are shamefully pernicious in this respect, and annually levy a life-tax on the students frequenting them. Each professor remains but one hour, and, while lecturing, is in a state of active excitement, which renders him comparatively unconscious of the state of the air, but the students from whom a close attention is required for six or seven hours, of which four are consecutive, sit passive victims at once of poisoned air and scientific stupidities, a very practical commentary on the benefits which their future patients are to divine from studies thus pursued.

Precisely the same state of the air is attained when many persons are breathing in an ill-ventilated room for a short time, or a few persons for a long time. Hence we frequently find the nursery and the sickchamber in a condition, equally fatal to health as a medical lecture-room or ----, of course, other crowded assembly. This source of impurity every family may avoid by keeping the top of the windows a little opened, with a good fire in the room, if the weather be cold. A second class is more subtle and widely extended, as the effluvia from privies, sinks, slaughter-houses, glue factories, pig-pens, cellars, grave yards and the thousand nuisances of cities which combined with privations, with destructive excesses, and with the various moral nuisances which belong to close habitation, tell so heavily on human life, that in Paris where they know how to take statistics, it has

been ascertained that the population is extinct between the fourth and fifth generation of city life, and is kept up by supplies from the country, on whose resources cities act like social and industrial Maelstroms, or a machine in which human beings are ground up as raw material to come forth again in the shape of different products to which they have been sacrificed.

To avoid their impure atmosphere and other pernicious influences together, there is no other course for parents open, than to remove at once from the cities to the country.

There is yet a third source of impurities in the various miasms of fever, cholera and other diseases, which, though more rife in cities are not confined to them, and some which are local, as in low and marshy districts. These are all more or less beyond the control of the individual man, and require for their extirpation the wisest and most extensive social combinations. A beginning has been made in the institution of quarantine. It would lead too far to enter deeper into these matters and does not properly belong to this book.

Another elementary relation is that which we sustain with the earth.

A fine couple of playmates truly! our little rosycheeked urchin and the big planet, old heavy mother earth! Never mind, they will understand each other. See how he rolls and tumbles and gambols like a dog over the lawn, or turns a somerset—that's it, over and over again, hurra! And think you the old mother loves not to feel her little ones on her big heart? In

all these arrant sports through tender infancy, she inspires in us those healthy rural instincts which in riper years will make the sturdy farmer, the noble fellow-workman with the sun, by whose labor and love and thought he refines those germs of beauty and utility in her vegetable and animal life which God entrusts to human care.

Our grand explorations and our infantile sports, are, perhaps, equally important in planetary results, as to the eternal eye which looks through the shadows of centuries, the forms of the acorn and of the majestic forest oak are equal in the past, both crumble into dust, and equal in the future containing both in germ.

The soil by its exhalations exerts important influences upon our health. This we may appreciate by the general vigor and soundness enjoyed by the industrial classes engaged in agriculture, unless where local vices, as in miasmatic districts, counteract this effect. The Indian, and the trapper, and hunter who come to shun the walls of a house, as if it would stifle them to sleep under anything closer than the shade of a tree or a rock, whose slumbers are lulled by the breeze of the prairie, or who in cold nights seek the hollows where the cattle have been lying, prove by their elastic health and the ease with which they recover from injuries which would prove fatal to feebler frames, the grand tonic influence of an earth-bed in the open air, connected with other habits of an analogous character. Nature makes us pay dearly for our civilized luxuries with compound interest on compound interest. Ceasing to be luxuries, they become the necessities of infirm health, and we lose at the same time the enjoyment of artificial conditions and the power of enjoying the primitive nature which we left behind us in our first desertion of that unwritten law, to which the savage for the most part still adheres.

This does not prove that we are to retrograde into savages, (it would be sublimely ridiculous to see a dandy with kid gloves play the savage,) but that we are to advance and become true men, and shows how careful we should be not to put nature out at the window while we admit art by the door. A correct physiology easily reconciles and combines the advantages of both. A remarkable evidence of the healing powers of the earth is given in the cure of scurvied sailors long strangers to her friendly bosom, who often when put on shore to die, are revived by the fresh smell of the soil, and graze with their loosened teeth and bleeding gums on any green thing they can find. In a few weeks these incurables are almost restored to health. The mud and earth baths used in different parts of Germany, f. i., Steben in Bavaria, have shown remarkable results.

The little human vermin of our cities who anterior to their pupa-transformations into news-boys, street-sweepers and the like, are left to take their delight in the gutters, really fare better in their chances of health, notwithstanding a thousand drawbacks, than most of those delicately reared children whose mothers are afraid for them to dirty their hands.

"Cast the bantling on the rocks,
Suckle him with the she-wolf's teat,
Wintered with the hawk and fox,
Power and speed be hands and feet."

There are for man two paths of development, one of necessity and adversity, constantly threatening destruction, and awakening the strongest efforts of his self-preservation in their conquest, the other of charm-attraction and sympathy which lead him onward unconsciously to a harmonious expansion of his life. The pine tree is a natural emblem of the first character, the magnolia, perhaps, or the rose of Cashmere, of the second. We cannot, under existing conditions, attain the second, so that it is the part of wisdom to take the first. Nature is always faithful to such as trust her faithfulness; and, without any affectation of asceticism, we shall be the healthier and happier in proportion as we earnestly cultivate the primitive relations which she offers us.

Water among the fluids, as light among the aromas, is essential to every definite form and order of structure, from the crystal to the highest form of animal life. It is necessary to their existence, to their preservation and to their regeneration from decay or disease. Water is the principal solvent, penetrating and cleansing bodies, as truth penetrates the soul and washes away errors and the evil dispositions resulting from them. This is not effected suddenly in either case. The first effect of dissolving dirt only causes it to show more plainly. The first effect of watercure, after it has fairly taken hold of the system, often exacerbates the diseased conditions, revives old symptoms and causes the organic dirt to show itself in hideous boils, eruptions and evacuations of other kind, with grave functional disturbances before washing it out entirely in eruptions of horrible fetor from

the skin and mucous membranes, presenting in grains or globules the mercury and other mineral poisons which have infected the organism and which were causes of organic error, because they fulfil no true relation in its tissues. Water has been recognised by the instinct and common sense of the chief religions of the earth as the material symbol of the spiritual regeneration, as it is actually the instrument of organic regeneration into health, the only sure basis of spiritual regeneration. In England, as well as in all other northern countries, immersion and ablution were used in order to have protection against the cold air; and only when in the 17th century the baptismal immersions were discontinued in consequence of clerical quarrels, cold water bathing came more and more out of general use. The ignorance of the people in medical matters was another reason why cold bathing was looked upon as dangerous, since it was the interest of the drug-doctors to invent new names, new methods and new medicines, and to cry down all the old ideas and practices, &c., &c. Every look into history shows us that from time immemorial cold water has been considered a very necessary means to preserve and restore health. The Greeks and Romans never erected a bath without a "Piscina." a cold bath. Hippocrates, Celsus, Cælius Aurelianus. and Galenus call cold baths very useful and healthy; Musa recommended them strongly to Augustus and Horatius; Plinius and Seneca give testimony in their favor, and Lampridius says that the emperor Severus cured his gout with cold water alone. Thucydides, (De Bell. Peloponn. Lib. l. cap. 49,) after

describing the plague which was raging in Athens during the Peloponnesian war, says that many of the sufferers threw themselves into water and were cured. Lucian calls the Chinese of his time Makrobioi, (longlivers,) and ascribes their long life to their great propensity to drink much water. Sarcone, Wright, McGregor, and Jackson, (Coll. of Select Treat. for Pract., Vol. XII. p. 27; Vol. XVIII. p. 592,) observed the excellent effect of cold water in malignant fevers. Desgenettes describes the case of a French soldier of Napoleon's army in Egypt, who, suffering of the pest, escaped from the hospital of Boulak, sprang into the river Nile, was about one mile and a half below Embabath fished up and cured. Andreas Tiraqueau, a celebrated jurist, drank only cold water and washed himself daily with it; he gave the world forty-four healthy children, and forty-four learned books. Wieland and Bodmer, reaching the respective ages of eighty-one and eighty-three years, drank nothing but water and washed. Ninon de l'Enclos and Diana de Poitiers kept their beauty unimpaired till the age of seventy years, by drinking freely cold water and washing with it. Friedrich Nicolai slept once in a convent in the Tyrolean Alps, where all the monks appeared very lively and hardy, though most of them were over one hundred years old. They gave as a reason for this condition their rule, which allowed them to eat only one hearty meal for dinner, while breakfast and supper was very simple, and the only drink water. Hufeland acknowledges, that men might live up to two hundred years, if they would avoid diseases, medicine and vices, and use freely

water. The Jews, Mahomedans and Hindoos have made the bath a practical rite of religious hygiene, and by their daily and thorough ablutions, bring their organism into that state of purity and elasticity in which the soul can play most purely and freely, and receive its admonitions from higher worlds. But enough of these historical truths, for which I refer to the history of the Water-cure, annexed to this book.

Those agents which stimulate more than they nourish, weaken the organism; but cold water, in its primary effect, is the opposite of a stimulant, and it becomes a tonic only as in connection with its cleansing properties, the depressing effect of the first chill is followed by a reaction in the elastic vital forces of the organism itself.

This is a spontaneous and not a forced expression of higher vitality. Hence the pleasurable vigor succeeding a well managed cold bath by swimming, plunging, douche or simple ablution, with proper frictions, does not give way like that produced by coffee, tea, chocolate or spirituous liquors after some hours, to a state of sinking and depression which craves the repetition of the stimulant, and makes the system feel ill at ease and below par until it is obtained, when a fitful excitement again takes the place of that calm strength and self-poise which belong to the health of an uncontaminated organism.

Coffee, tea, chocolate, vanilla, opium and spirituous liquors are direct stimulants, which force the organism to express a higher life for a little while only, to abandon it afterwards to greater depression; whoever stimulates with them, is spending at once the interest

and principal of his organic fortune or stamina of constitution. He may not always be directly conscious of this, either from the firmness of his nerves. or because he cannot appreciate what is going on within him. All persons are not capable of taking cognizance of their own sensations, of comparing them at different periods, and of tracing the connections of cause and effect; but the laws of the vital organism are unitary and universal, such apparent exceptions notwithstanding. The same substance may be a direct stimulant, and merely a stimulant to one person. To a second of firmer nerve and stronger assimilative powers it may only be highly nutritious. Of onions especially, as well as of food in general, in comparing the states of fever or diarrhœa with that of ordinary health, I have observed this, and apparently of coffee and tea. To a third person, these substances shall be both nutritive and stimulant, but one property decidedly predominating. What appear to be exceptions, are merely the different relations which the same substance sustains to the organisms of different temperaments or individuals, but the law remains unchanged in its essence, and all direct stimulus by the introduction of substance into our organism which they cannot assimilate to the nourishment of their tissues, is ultimately depressing, diseasing.

A constitutional effect sometimes becomes manifest only on the child or grand-child, visiting on their deteriorated organisms the sin of their parents. A robust father may, while infected with psora or syphilis, beget a child who shall come into the world half a wreck, and drag out a lame and shattered existence, while the father individually recovers apparently his former robust health. Thus, if children begotten during the excitement of a debauch or the depression consequent on one, a deteriorated condition, temporary and functional with the parent, becomes permanent and organic with the child, and such instances of deteriorated offspring resulting from most deplorable ignorance or carelessness are continually observed.

Cold water contrasts in its tonic powers with the above mentioned agents. It is an *indirect* stimulant, which merely arouses the dormant vital powers to assert themselves in self-preservation. It is a rough, candid friend which does not flatter us with a factitious strength and liveliness, but makes us conscious of our faults and weaknesses by a searching criticism. Thus it causes us at first to shrink and shiver as we shrink and shiver morally from the exposure of our faults; but after repentance comes amendment, and after amendment soundness, health, vigor, and this is the same in the moral and physical world.

Here it is well to remark, important to remember, and most fortunate to observe in practice, (since over treatment is not only the fault of beginners, but also of almost every practitioner in the water-cure in this country, who, by bathing to excess, too often and too long at a time, by using wrong and too strong applications of the water, compromise, often for years, the benefit of nature's grand restorative,) that the vital reactions which follow the cold bath, however widely they differ from the direct stimulation of coffee,

liquors, &c., do not the less determine the evolutions and expression of latent vital force. If this be determined more rapidly than is consistent with the nutrition of the body by food, and the natural influx of electric nerve-power from the earth, the air, and the various vegetable, animal, and human organisms with which our uses, pleasures, senses, and affections bring us into communion; if, in short, Nature is hurried, she will play us the old trick of the goose that laid a golden egg every day, but her master being in a hurry to get rich, cut her open, and that was the last of the golden egg.

By hurrying water-treatment, as by the ordinary gymnastic exercises which have in view no outward use naturally directing the amount of force to be expended, we gain not real strength, but a factitious tone or irritability. More than fifty cases which came from other hydriatic institutions to me, have proved the truth of this remark; besides this, every day's experience, when drug-doctors, without any knowledge even of the simplest principles of hydriatrics dare to prescribe water applications to some extent, shows it clearly. We can cut a great many capers, but our life is not sound, sweet, and reliable, and, in the end, our doing becomes the martyrdom of being.

Amongst all the forms of water-uses, the best in a hygienic point of view, is that which nature prescribes to the savage and the peasant, and to animals all over the earth—to plunge and swim in streams. We have thus a natural temperature varying little from that of the atmosphere, a little cooler in summer and a

little warmer in winter, and throughout the warmer zones and seasons a source of delicious refreshment, as in the colder a most bracing tonic. The sensation of moving in a new element is entirely "sui generis" and indescribably pleasant. It operates a sudden transition from physical heat and fatigue, and from mental or moral anxiety and depression, and gives us an expansive sympathy with the great life of nature, as if, like the fluid that embraces us, we entered into every thing and received every thing. Our citizens, with their humdrum artificial habits, cannot by the highest stretch of imagination conceive the mere joys of physical existence known to the healthy child or beautiful savage of the Pacific isles, whose symmetry and uniform health have excited the admiration of so many navigators, and of which one of the chief natural causes is the cultivation of his aquatic relations. It is well known that they are almost amphibious.

The peculiar motions of swimming, raise the clavicle and scapula, expand the upper lobes of the lungs, and determine full respiration in them, so as to give precisely that development needed to counteract our so common tendencies to consumption.

Tubercles form in the great majority of cases in the upper lobes of the lungs, and it is this region that is contracted and inactive in persons of phthysical conformation. To effect free and full respiration here, is the primary indication in prevention or cure, and by no method can this be equally well attained as by swimming, where it is done unconsciously and in connection with other uses and pleasures. For either children or adults, next to swimming or the daily tub-

bath, envelopment and friction with a cold wet sheet is most to be commended. It is the mildest form of the cold bath, and is suitable for invalids too weak to bear any other, although highly refreshing to all persons. It requires the services of a strong and healthy assistant whose friction imparts much magnetic virtue at the same time with the tonic influence of the cold water. More or less friction should invariably accompany and follow every form of the cold bath, and it is more efficient when administered by another person. The circulation thus attracted and quickened on the surface, must be sustained by gentle and continued exercises. Otherwise chilliness supervenes after some minutes, and much of the tonic influence of the bath is lost. In feeble persons even troublesome congestions are thus occasioned by neglect of friction and exercise after the bath.

An opposite extreme is equally to be avoided by excitable temperaments, whose strong vital reactions deceive them in regard to the amount of force they have to spare, and who, by too violent and long-continued exercise after the cold bath often exhaust themselves for the day. The management of these vital vibrations in the use of cold water requires a very delicate wisdom, and constitutes the secret of success or failure in most cases of treatment.

In earth, water, and air, we have the continents and representatives of solid, fluid, and gaseous bodies: there is a superior order of relations which we sustain with a class of agents, sometimes classed as material, sometimes as immaterial, which constitute the media through which spirit acts on matter, which we

shall designate as aromas, and of which the elementary and generative principles are, *heat*, *light*, and *electricity*, whose combination is presented in the *solar* ray.

The generative action of heat on moist soils is familiarly known, and not less so to the chemist and physiologist is the necessity of light to perfect and characterize the type of all forms and organizations, from the crystal to the highest form of animal existence. Deprived of it, substances possessing a strong affinity for each other, will remain mixed, but uncombined in the chemist's laboratory, plants grow feebly, are blanched, and cannot reproduce their species. Amongst animals, contrast the comparatively rudimental structure of moles, of eyeless fishes found in subterranean streams, of the slimy reptiles under planks or rocks, with the higher organic types in which light has more fully co-operated. To get a clear and comprehensive view of the solar influence, let us ascend a high mountain till we come to a point where the solar ray, after having traversed space for ninety-five millions of miles without creating any thing, begins to manifest itself. The air is becoming too thin for us to breathe, the blue of the firmament disappears in a black void above us, and the green splendors of earth's fairest gardens give place to the glacier and flee before the eternal ice-breath. All forms of living organism cease, and the very elements fade into uncertain and ghost-like existence on the confines of vacuum.

Descending from these altitudes of eternal death and frost, it grows brighter and warmer as we near the

extended surface of the earth,—first a belt of moss clings to the rocks or grows beneath the snow, forming a pasture for the chamois, then the larch, pine and other resinous plants cheer the bleak landscape with their evergreen, and provide harvests for the bird and squirrel. Foliage and flowers, with thousands of winged and climbing, running and creeping creatures soon start into existence round us, as we accompany the solar ray in its descent to the plains and valleys, where the teeming hosts of life and wealth of prairie, forest, brake and swamp issue from its intense embrace, and we are lost again in the positive infinite of countless forms, of real and concrete life, as before in the negative infinite of blank space and elementary dissolution.

It is also in the vernal season as the Earth turns her breast towards the Sun, that these effects of creation appear. Each spring as it renews the life of the earth, commemorates that epoch when the stars sang together at the birth of their little sister. Germs and seeds that slept, now unfold into being, and the birds, our mother earth's winged poesy, repeat the songs she teaches them in those hours of rapture, when she, like them, melts on the heart of her radiant lover.

We are next to consider that the sun, being thus the active creative cause of all organisms or bodies, becomes the medium through which God inspires the souls of those bodies, and the spiritual properties of love, truth and use, or practical energy, manifested through these organisms in the ratio of their development and perfection.

We may observe the manifestation of intellect and

affection to cease simultaneously with the phenomena of organic life, as the circulation stagnates by the withdrawal of heat in freezing; and we observe them all revive together by timely removal to a warmer atmosphere.

The social affections are strictly dependent on physical comfort, their genial manifestation is sup-

pressed by cold and darkness and starvation.

Mark the magical change in a party of friends, which, after exposure to the bleak wind, travelling some stormy winter-night, find themselves housed before a brilliant, blazing fire which thaws the current of song and mirth and social interchange of mind, together with the icicles on their hair, and the snow upon their coats.

On the other hand, the reciprocal influence of our passions or affections in exciting physical warmth is equally well-known. Thus we speak of a warm heart, and a clear head, and the flush of colour, with physical warmth beginning in the chest, and extending to the whole surface, are perfectly sensible to us in meeting those we love. From these general considerations on the sun and his ray, as the cause of all vital growth, movement and passion on the surface of the earth, let us proceed to make a special application to our household-life, and the rearing of children.

Well might one exclaim, on seeing the provision of our cities, whose families degenerate and become extinct at the third or fourth generation—" put out the light, and then put out the light of life."—Here we have millions travelling on through the long winter-

night of social destitution, whose misery excludes at once the light and warmth of the sun, the refinements of affection, and the opportunities of mental culture, from their nests piled in narrow alleys, and obstructed by hills of ordure. Yet scarcely more fatal to these is their exhausting toil under such conditions, than to many of their wealthier fellow citizens—the mistaken delicacy with which they seclude themselves from their truest friends, the earth, the air, the water and the sunshine: the only friends that never forsake us, that never misunderstand us, which are always ready to help us, and whose favours never compromise our independence. The sunshine is the smile of God made visible in nature, and inspires vigour and cheerfulness in our bodies and souls, just as it disperses the clouds from our atmosphere, and quickens vegetation. Those nations and classes who live in the sunshine, whether we seek them on the quays of Venice, or on Indian hunting grounds, or by the banana of tropical island gardens, are still free from our metaphysical and invalid habits. What strength and life they have, is really their own, and available for enjoyment. It is not until men begin to house themselves that they become introspective in their minds, and cultivate habits of self-torture in their religion and morality, corresponding to the neuralgias and dyspepsias which invade their debilitated frames. How often, when we have been considering ourselves the most unfortunate or ill-used individuals, has the laughing indifference of nature done more for us than any condolence or sympathy. Though our climate and the squeamishness and bad

habits of our people have scarcely permitted me to make satisfactory trial of it; I am convinced that a tonic agency of great value might be obtained by exposure of the whole skin to air and sun, either out of doors in the milder seasons, or in towns, or during the winter season, through the intervention of a window. When we think how large a surface we keep either covered or exposed, how immense an influence the tone of the cutaneous capillaries, and the activity of their pores have on the whole system; that we have expanded here on a sensory surface about one half of the whole nervous system, the objective portion, whose subjective correspondence is found in the brain and spine; when we consider how great functional disturbances are occasioned by a superficial burn or blister; we shall be convinced that medical science possesses in the sunshine the simplest and most pleasant of agents, a new and valuable resource in the treatment of many cases of chronic disease.

Children, with peculiar grace and convenience, may wear such clothes as allow the solar ray to play freely about their skins in the fine weather, and the tone, thus communicated from the skin to the mucous membranes, will save them many a catarrh and croup and diarrhæa.

If we combine with these light and convenient manners of dressing our children, some application of their forces, f. i., in gardening, we shall procure for them a treasure of robust health, which is scarcely known among our parlour children.

Most children have a fancy for gardening; there is probably no one, on whom, under favourable cir-

cumstances, some flower, or tree, or vegetable will not exert a specific charm strong enough to interest him and her in its culture and uses. This furnishes the best exercises—not straining and irritating the nervous system like our idle gymnastics, whose violent efforts, when not positively injurious, cultivate a factitious and fugitive strength; but gentle, permanent, and interesting us in their objects, so as to render us unconscious of the effort. Work thus performed, is real play for mind and body alike. Gilbert says under the head—Exercises in his Hygiene:

"Mere bodily labour without thought, object or interest, as in the treadmill, is as little related to the due exercise of the entire man, as intense application of mind in a sedentary posture, and in a confined room. There must be a feeling of interest or responsibility combined with the bodily exertions; such pursuits as call for the regular and varied exercises of all the faculties of body and mind, will be found to yield the more proper stimulus to the former, and the most appropriate pabulum to the latter. Let there be a due share of mental excitement, then the powers of the constitution will expand with the occasion, and its capacity increase with the mental ardor awakened. In such a state of the mind, it grapples cheerfully and successfully with difficulties which would be quite appalling to the passive or uninterested person. The boy with his kite or gun will exert all the powers of his muscles for five or six hours, or even a whole day, and scarcely complain of fatigue; while the same amount of muscular power, exerted against his will, could not be secured by ordinary means." G. gives then a case, one precisely similar to which occurred with one of the servants of my father—I give G.'s own words: "A young man, desirous of seeing his female friend fifty miles off, decided upon a journey on foot, which under the mental stimulus peculiar to the case, he performed in one day. He found, however, that the object of his affections was at a party ten miles further, to which he repaired on foot without delay. He joined there in the pleasures of the evening, and danced most of the night with his wonted vigor and vivacity. Now had this performance been divested of those circumstances which operated as mental stimuli, undoubtedly he would have sunk down with exhaustion before he arrived at the end of his journey."

But attractive out-door labours, whilst they powerfully promote the child's development or adult's health, may be at the same time sources of pleasure or profit, and initiate us into the most cherished pursuits and valuable industry. It is a custom in many German families, of which Zschokke has spoken in his admirable tales, to train every youth, whatever his prospects in life, to some mechanical trade; thus at once assuring him subsistence in case of reverses of fortune, a better change of health and physical development, a medium of sympathy with the labouring classes, and a healthful recreation at all time; thus, e. g. the Grand Duke of Saxony Weimar is an excellent turner; Louis the XVI. was a good locksmith, &c.

In the study and co-operation with nature for the pure love of the object, man becomes an artist, and inspiration finds him unawares. The plants have

wonderful secrets to tell us yet, which no botanist has suspected.

Such pursuits also exercise the most wholesome influence in correcting the vagrant imagination which, in the absence of sensible subjects of attachment, compromises the efficiency of life by its dreams and idle fantasies.

The education of the age, so prone to abstractions, which teaches even the most practical matters, as arithmetic, geometry and physiology, in a simply theoretical manner, and which concludes, without having furnished to the pupil any means of earning at once an honest livelihood; stands peculiarly in need of some practical improvement of this sort, and I have been gratified to observe the late movement in Massachusetts and Maryland on the subject of farm schools, though it is desirable that our active relations with the vegetable kingdom should commence at a much earlier period than these can provide for.

I will conclude these hints by quoting, from a noble book, Sue's Martin the Foundling, the history of a cure accomplished by his father, the late Dr. Sue. "He was summoned one day to a rich invalid, and he found a man expiring from the exhaustion caused by excess of every kind; the blood impoverished and vitiated in its essence, circulated feebly in his veins more like a fluid of death than of life. The greatest doctors had abandoned this unfortunate man, predicting his speedy end. The savant, the profound thinker, bethought him of those fearful and mysterious tales, which told of the infusion of young and generous

blood in the exhausted veins of old men, nearly dead from debauchery-they suggested an admirable idea. Hangings of silk and gold, impregnated with pernicious perfames, covered the walls of this opulent dwelling, and kept it in a half obscurity. These hangings were taken down, the genial sun was suffered to enter everywhere, and the walls were hidden by masses of green branches freshly torn down from resinous and balsamic trees, exhaling in abundance those gases that render the air vital and pure; then young, robust and healthy nurses alternately came and applied their full breasts to the mouth of the dying man. Scarcely had his parched lips been moistened by the regenerating milk, scarcely had he breathed the vivifying and salubrious air, exhaled by the fresh branches by which his bed was shaded, than he seemed to revive, his impoverished and corrupted blood seemed to be renewed and regenerated; he was saved, he lived; and his safety had caused neither tears nor blood. Pure and nourishing milk, and a few branches from the green trees, and the genial rays of the sun, were the only instruments of this marvellous cure."

To develop this subject would require volumes, and would include the adaptations of diet, in the widest sense, and of aliments, varied in accordance with ages and temperaments. As it is incompatible with my limits, I content myself with remarking the immense importance of observations in this field, and the culpable ignorance and apathy which now prevails. St. Pierre remarks the specific attachment of animals to plants, he observes how each tree or herb

becomes a centre of relations for numerous species, to some of which it furnishes a dwelling, to others food, a sphere of existence either permanent or temporary, partial or complete. He shows how, by the harmony of contrasts the life of the largest quadruped is dependent on the humble grasses, and man more universal and endowed with a larger range of adaptation, has relations proportionally more delicate and complex than any of the inferior creatures.

With the animals themselves, our relations of pleasure and use are more easily recognised, as they approach us more nearly in their natures, and become clearly objects of passional attraction and repulsion. The first love of children, so fortunate as to escape the waste of their affections in a morbid sentimentalism for dolls and inanimate objects, is some dog or kitten, lamb or squirrel; their choice is now very limited, yet it sometimes reveals a sympathy of character, and is certainly the source of a pleasure as pure and delicious as any of our maturer life. The heart is so rich, so trustful in childhood, so grateful for any thing to love, so full of glorious prophecy which society is sure to disappoint, that we are wise in not waiting for an opportunity of full reciprocation, and in culling some flowers of affection, since we know not whether it will be permitted to us to gather its fruits. Whilst the child's heart is being nourished by these simple gratifications, he is often besides attaching to him friends most useful, though humble, whose devotion stops at nothing short of life. I need not here detail the numerous circumstances in which men have owed their lives to the courage and constancy of dogs or of horses, nor those in which an animal's devotion has caused it to refuse nourishment, and forego its own life on the grave of its master and friend.

Neither spiritually nor physically can we, with impunity, break the links which God has established between the different orders of created life. Domestic and domesticable animals, whilst they approach in their passional nature very closely to man, sustain also a contrast of equal importance in this, that they are by their inferior development less self-conscious, introverted or metaphysical than man, so far at least, as we can judge of this by the analogy of their habits and actions, which are more generally and directly explained by the immediate exigencies of their subsistence, reproduction of their species and visible objects of affection than human habits and actions, and still more than the habits and actions of civilized man. The life of nature seems to play more freely through them, thus they become mediators for us, too prone to isolate ourselves in ideas and abstractions, and to turn to our bane the privilege of a higher spiritual development.

Connected with this very high use, we find in animals the media of a vigorous organic life. The nervous system of our planet, of which we first become conscious in the currents of electricity which pervade the atmosphere, and of magnetism which traverse the earth in certain directions, and cause the deflection of the needle in our compasses, sustains in permanent relationship all the parts of the globe, and the creatures inhabiting them; receives a higher degree of

refinement in the organic life of plants, and a still higher degree in that of animals, before its ultimation in man. I shall not speak here of the alimentary relation in which we stand to the vegetable and animal kingdom. The more concentrated, rapidly nutritive and stimulating character of animal food, is to be soothed by the quiet vegetable in accordance with the individuality of the eater. I continue here with the contemplation of animals, of which we are sensible through other avenues than the stomach and the sense of taste.

Dr. Rush advised horseback exercise as almost a specific for consumption. We combine in this kind of exercise several very desirable conditions:

1st. A gentle and equal motion, graduated at will, and capable of being continued much longer than any active exertion with the same strength, consequently of stimulating the circulation with the least degree of exhaustion.

2d. A motion, which by its succession of slight jars determines a freer play of the diaphragm and thoracic muscles, and fuller respiration, especially in the upper lobes of the lungs, or boundary of the thoracic cavity, where repercussion occurs.

3rd. A constant change of fresh air.

4th. By forming a social party of several congenial persons and horses, the organic and spiritual tonic is carried to a still higher degree.

5th. Many a man, in weak health, finds, as he mounts his horse a specific against despondency; it seems as if all his dormant ambition was now fully awakened. The influence of sleeping with animals,

about which so much has been said, pro and contra, deserves more consideration than it has yet received.

Man has shown himself hitherto only as the tyrant and foe of humbler fellow creatures, and even exterminated them before him, in order to organize all the tortures of his miserable cities. It is familiar to those who have visited new countries, that animals so far from shunning man, approach him with curiosity and interest, or else remain as before, until many of them have been killed or wounded, and the rest thus taught to avoid him as a ferocious and evil-disposed being. We know not, of what valuable uses and friendly relations we have thus deprived ourselves by our cruelty towards those creatures which looked up to us as of a higher order, and not as beings worse than the lowest of their own species in tyrannical barbarity. We may regain our natural position by throwing away our instruments of torture and destruction, and allowing these poor creatures time to recognize our friendly intentions, and to forget the hostile traditions and experience of so many generations in the past. Why shall, for instance, all dogs be punished and killed, these best and only friends of man, when one or two got mad in consequence of the abuse of a human brute? Why not punish him whose cruelty caused the disease?

I have reached the human or social relations, where the spiritual element prevails still more than in our animal relations. I must limit myself to a bare statement of the principal heads.

The social or human relations, possible for either child or adult, are comprised under the four heads of Friendship, Ambition, Love and Family. From these, for infancy and early childhood, I may exclude Love, since its manifestations, however spiritual, are inseparable from the development of the reproductive organs.

We have now the relations of friendship and ambition, which obtain between the child and his peers of the same age, or of a few years older or younger, and his relations with nurses, with parents, with grand-parents, and with the social body at large.

It will be most happy that parents should divest themselves of all notions of arbitrary duties towards their offspring, or of their children towards them. Let nature alone, she will best regulate these relations and duties by free and spontaneous affections. When these are absent, all our efforts to replace them by arbitrary duties only make matters worse. The parental relation does not enable us to understand the temperaments, the instincts, the desires of children, so imperious, because unused to disappointment, and all requiring some element essential to their true development.

God assigns to certain characters a natural aptitude to sympathise with children, to comprehend their wants, and to make themselves in turn understood. This aptitude may be improved and cultivated like any other natural gift, but when it is absent, there is nothing to cultivate! Grand-parents and other aged persons who, by a contact of extremes, often sympathize more with children than the parents, nearer their own age, may intervene with advantage in the cares and instruction of infancy;

but the teachers and guides to whom nature gives most influence, are the child's peers, older than himself by a few years, and whose privileges and accomplishments spur him to ambitious emulation. Nothing to a child can supply the place of companionship. The turbulent little fellow who deafens you with his cries, and threatens to turn the house inside out, becomes gentle and moderate as by magic, when he finds himself in presence of other children as fiery and high tempered as himself. This is an accord proceeding from similitude of character, or an effect of moral homœopathy; in others we find a still more charming result from contrasts of character, between the violent and the gentle, who often form the warmest and most lasting friendship.

These desirable effects of criticism and of sympathy are attainable only on condition of the frequent reunion of large numbers of children under the supervision of judicious nurses or teachers.

Ascending that ladder of relations and combinations, by which earth joins heaven, I have now to speak of the divine, which does not properly belong to this book, but which I have to touch in order to complete the schedule of these prefatory remarks. The highest and final use of all these elementary, vegetable, animal and human relations is, to bring the individual soul into relation and harmony with God, of whom, in health at peace, it obtains a distinct and, as it were, personal consciousness. In this harmony alone, we rest, we are satisfied in happiness, and our being is completed, so that action thenceforth

is no longer a struggle, but a pure, divinely creative energy.

Children especially enjoy by grace or nature this highest communion, so soon disturbed and broken by the disorders of the world they are to enter. Thus Christ says:

"Of such is the kingdom of heaven."

This infantile completeness is in perfect accordance with the law of the contact of extremes which here at the commencement of our existence gives a double prophetic reflection: 1st, of those properties and privileges which are to constitute our highest and maturest attainment; and 2nd, of the last hour of our mortal day, the second childhood or infancy of age, in which the rudimental or imperfect childhood is repeated, as its peace, serenity and fullness of joy is repeated in the highest developments of manhood and womanhood, and their equilibrium of being and action.

What practical considerations are suggested by this divine life of infancy and early childhood?

What is the nature of that permanent revelation by which God communes with the individual soul?

Intuition is the name commonly given to this:—It is a life of emotion which flows from within outward, and which rules circumstances according to its mood, instead of asking its guidance from them every moment, as we do in the obscurer life of the senses and intellect.

It commands by the spell of positive being to which all yield a pleased obedience. Thus little children in

their play use every one in the house as they fancy, and the parents, when their instincts are not suppressed by conventional notions, are never so well satisfied as in obeying them. Few reflect how sacred a principle is involved in the common practice of carelessly interrupting children in their sports or reflections, and imposing upon them the control of a foreign or external will.

The subject may be in itself the merest trifle, or a matter of great moment, but the principle is in all cases the same; they feel themselves called to surrender to this outward force, of whose source they are unconscious, whose reason is dark to them, the inmost promptings of their own being, to deny God in themselves. I saw this morning, a child, four years old, of rare loveliness and grace, and amiability of deportment, the little blessing of the house, and certainly not spoiled—in the ordinary sense of the term, for her habits were regulated with as much wisdom as kindness. She was in high glee racing round the centre-table when the dinner bell rang, and her aunt called her suddenly to dress and brush her hair. The person, the manner, the operation and the occasion, were all intrinsically agreeable to the child; all save the abruptness with which her previous action, the determination of her will, were broken in upon. She obeyed without resistance or hesitation, but suddenly all her mirth departed, she seemed oppressed, as if by some hidden sorrow, some grievous outrage; she burst into tears, remained more than an hour in anguish and despondency, and could not come down to

table, though every thing was done in the kindest and most consoling manner.

It was simply an evidence of her strength of character; and the anguish felt at this interruption of her spontaneous or intuitive tendencies, is a pledge of her spiritual sanity, confirmed by the sound health, high spirits, and gushing happy life which render her an object of general admiration.

Let us learn to respect children; to provide for their individualities of character, at least negatively, by not outraging them, if we have not all the means of positively gratifying them.

A little room of their own, a sphere with which they can identify themselves, and personal property, which is an extension of their identity, especially when it is the fruit or produce of their own exertions, are necessary to cherish that self-reverence and selftrust which constitute the basis, if not of all divine attributes of character, at least of their efficient use.

All movement, whether of child or adult, in higher or lower spheres ought to be spontaneous, and not imposed on us by others. The true teacher invests tasks with pleasure, and skilfully disposes attractions to activity; he does not seek to distort the child's nature from its bent, nor impose on it labours, repugnant either from their essential unsuitableness, or from the false conditions in which they are to be executed. Children suffer habitually the most heedless oppression and tyranny in these matters, even in the best regulated families, from a want of consideration in regard to very simple and obvious arrangements, of which parents would be advised, should they, for only

twenty-four hours, faithfully try the experiment of putting themselves in their children's places as nearly as may be. The difference in age and position does not annul the maxim, "to do as we would be done by;" and when we realize that all integrity of character depends on the truth and force of the religious sentiment, on one unbroken communion with the spiritual source and fountain of being, we shall feel that all our religious teachings very poorly compensate for our failure to respect rights of the soul antecedent and superior to human forms.

In connection with this subject, I should also like to signalize a tyranny more subtile and pervasive, which at first aspect seems to lie beyond individual control. It is that of the whole social condition and habits in which the child is born and raised, and to whose exigencies and influences we submit as to a fatality or second nature, without for the most part questioning, whether they are or are not in accordance with our individual characters, and whether they are consecrated or condemned by the spontaneous tendencies and demands of the soul-whether therefore they are favourable to its development, or corrupt, oppress and emasculate it. Yet if our especial institutions, our hospitals, penitentiaries, almshouses, &c., the characteristic progeny of our present state of society, a party coloured patchwork of Christianity and science, on a ground plan of selfish and brutal ignorance; undergo periodical examinations, is it not proper that society as a whole, be it civilized, barbarous or savage, should from time to time pass under the censorship of the individual soul, which is to find in it a rack of torture, a grave, a dwelling or a temple? Yet this censorship is impossible whilst we remain in its atmosphere, and subject to its habitual influence. At least all censorship so made, must be merely a protest of suffering, without appreciating clearly those conditions which we essentially desire, and whose attainment constitutes the natural purpose of our lives. Hence the deep wisdom of that Indian custom by which the young braves, before admission into full membership of the tribe, are wont to pass a season in the solitary retirement of the forest. How much frivolity and factitious nonsense would vanish from our midst, before the simple and beautiful custom of retiring to the primitive forest-life each year, during a few days or weeks, instead of hunting for the absurdities of fashionable watering places.

I shall here close these remarks, happy if my suggestions shall open a happier future to one child, otherwise destined to have suffered like ourselves, his seniors in age, under that worst and most fatal bondage: the tyranny of parental ignorance.



## INTRODUCTION.

Principiis obsta, sero medicina paratur, Cum mala per longas convaluere moras.

The hydriatric treatises hitherto presented to the American public, have been for the most part crude compilations of cases unenlightened by a just perception of the principles involved, or they have been confused with one-sided views and theoretical abstractions, so that neither class has fairly presented the principles of water-cure, nor given safe practical

guidance for its application.

The recently re-published works of Rausse (Francke), Johnson, and of Weiss, are honourable exceptions to this censure. The object of the present work is to fill a vacancy more especially in regard to the diseases of children. It is well known that chronic diseases, (and I say this without blushing, although I am the proprietor and director of a hydriatric institute,) can never with safety be treated without the immediate attention of a thoroughly sensible water-cure practitioner in an institute. My daily experience, and that of hundreds of hydriatric practitioners in Europe has taught this truth to satisfaction. But it is likewise certain, that every one

gifted with sound sense and some observation, will be able to treat any acute disease, if he is led into the right road, and not blinded by prejudice.

I consider it the duty particularly of a parent to be not only the mental instructor of his child, but also the preserver and physician of its body. The system of Priessnitz has enabled us to attain this great desideratum with the aid of some preliminary instruction, which it is my object to give in this book.

If every acute disease were treated from the beginning with cold water, there would be no chronic disease; besides nobody would die of any acute disease, because it is a struggle of nature, which the body would not begin, if there were not strength enough in it for victory. But if, instead of assisting nature in her struggle, we suppress her kind efforts, and fill the organism with poisons: how can we dare to expect happy results?—It cannot be denied that poisons have been found in the fluids and solids of the body, which can have been brought there only by swallowing them into the stomach, by rubbing them in the skin, and by injecting them into the openings of the body. From these organs, they penetrate into the fluids and solids through the endosmosis of the veins.

Thus there has been found:

1st. In the Blood: hydrothionic-acid, (Marx); hydro-cyanic ditto, (Emmert); Iodine, (Tiedemann); Baryta, (Gmelin); Natron, (Bostock); Mercury, (Autenricth and many others); Arsenic-oxide, (Majer); Silver, (Seiler); Lead, (Tiedemann); different alkalies, (Majer and Tiedemann); Iron, (Tiedemann); Oil of

Turpentine, (Ficinus and Seiler); Alcohol, (Magendie, Beck and others); Asafætida, (Medical Academy in Philadelphia); Indigo, (Tiedemann); Madder, (Rutherford).

2nd. In the Urine: various Alkalies, (Mascagni, Tiedemann, Morichini, Woehler, Vogel, Soemmering); Borax, (Tiedemann); Baryt, (Tiedemann and Gmelin); Mercury, (Cantu, Mar, Buchner and others); Indigo, (Woehler); Rhubarb, (Tiedemann); Gamboge, (Tiedemann); Cactus Opuntia, (Wildenow); Asafætida and Saffron, (Jones and Monro); Musk, (Brugnatelli); Belladonna, Hyoscyamus and Datura, (Runge).

3rd. In Sweat: Hydrothion-acid, (Richter); Iodine, (Canty); Mercury, (Biett, Buchner and others); Rhubarb, Musk and Asafætida, (Voigtel); Camphor, (Tiedemann and Gmelin); Opium, (Haller); Artemisia Vulgaris, (Mueller); Gentiana lutia, (Richter).

4th. In Milk: Hydriodic-acid, (Woehler); Erysimum Alearia, (Voigtel); Opium, (Barbier); Rubia tinctorum, (Voigtel).

5th. In Gall: Mercury, (Zeller); Iron-Kali, (Tiedemann); Indigo and Lead, (Ficinus and Seiler).

6th. In exhalation of the Lungs: Phosphatic-acid, (Orfila); Hydrothion-acid, (Richter); Musk and Oleum Dipelii, (Tiedemann); Asafætida penetrates the whole organism, and transfers its smell to the breath, sweat, urine, and matter in ulcers, (Voigtel).

7th. In Saliva: Mercury, (Buchner); Iodine, (Cantu); Hemlock, (Voigtel); Tobacco, (Fouquier).

8th. In the fluid of the Pericardium: Prussic-acid, (Tiedemann and Gmelin).

9th. In Chest and Abdomen: Musk, (Tiedemann and Gmelin); Opium, (Laennec), &c.

10th. In Pleura: Arsenic, (Lassaing).

11th. In Brain and Spinal marrow: Arsenic, (Mar); Mercury, (Orfila); Alcohol, (Tralles).

12th. In Skin: Gustavia Speciosa, (Dierbach);

Nitrum Argenti, (Albers).

13th. In Bones: Mercury, (Haller, Kilian, A. W. Otto, Fricke, Mar, Christison, Brodlet, Fee); Iron, (Majer); Madder, (Giebsen); it produces galeum luteum, (Histoire de l' Academie des Sciences de Paris, 1746, page 99).

14th. In Fat: Mercury, (Huenefeld).

15th. In Flesh: Vide Duflos and Hirsch's work: "The Arsenic," page 42. In this book we find, page 39, the following remark:

"It is a fact proved by Orfila, that Arsenic or any other metallic poison, if it be brought into a living body, whether internally or externally, not only spreads into the neighbouring parts, but is transfused into the fluids, urine, and the whole organic texture. This fact can be shown chemically, if life is not immediately extinguished." Liebig holds the same opinion, and I need not add a single word, for they are men of acknowledged authority in scientific matters.

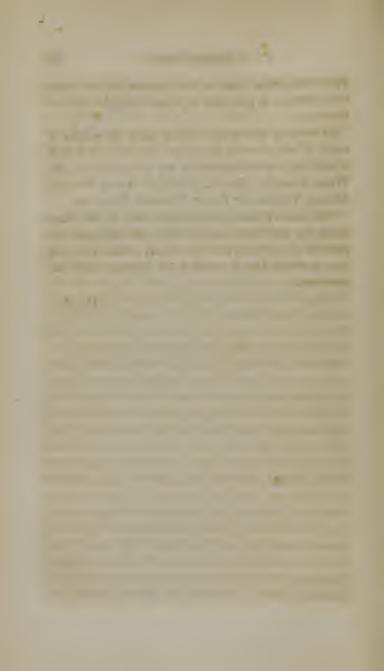
If such is the truth, how can we hope to obtain health by taking these poisons? If you intend to clean a house, would you pour into every opening all the dirt and filth you can collect? Would you not consider any man acting thus, to be insane? And yet you do precisely the same with the dwelling of

your soul, when you, at the moment when nature tries to clean it, pour into it poison to subdue this endeavour.

In writing this book, I have used the works of many of my German hydriatric friends, and I think it my duty to acknowledge my obligations to Jos. Weiss, Francke, (Rausse,) Piutti, de Meyer, Schmitz, Herzog, Parrow, de Kobbe, Hirschel, Cohn, &c.

The cases I have added, descriptive of the treatment, are generally selected from the authentic reports of practitioners of our society; cases from my own practice I have avoided, for reasons easily understood.

DR. S.



## ORIGIN OF WATER-CURE.

It is my intention to continue the course I have begun in this and former works on Hydriatrics. I will do every thing in my power to spread and make known the simple truth, which, untempered by medical intrusions, the great Priessnitz taught, after the scientific researches of centuries and the artificial life of progressing fashion and vice had, from time to time, so far removed the human family from it, that it, every now and then, seemed irretrievably lost. All the world hunted for the truth; the necessity of redemption was always deeply felt; death and misery triumphed; but it was sought for in the stars and in the depth of a diseased mind, as a hidden treasure, while it was to be found, as every other truth, open at the feet of every one gifted with common sense, virtue and simplicity. The water-cure, the only means of redeeming mankind, is not a cure of the body alone; it is also a moral cure, because every artificial excitement which could develope itself to passion, is not only suppressed and removed, but already acquired passions and vices loose their hearth, upon which they nourish the flame of demoralization. The drunkard looses his appetite for intoxicating drinks; the hysteric lady does not long for

the artificial nervous excitement of strong coffee and tea, &c.; the sensualist does not want unnatural stimulants to lust; the gossipping bigot does not feel the inclination to tear the character of his fellowbeing. There is only love and virtue in the heart of him whose body and soul is regenerated by a watercure, for a person who is well, feels, thinks, and acts well.

The following is a short history of the application of water in different ages. It will show that nature's own restorative and preservative could be sometimes repressed, but never entirely suppressed. It will prove that the greatest men of all ages, in medicine as well as statesmanship, after deep research and careful observation, returned to water as a diatetic and therapeutic agent of paramount importance to individual and social existence and happiness, and that it was lost out of sight whenever virtue sunk to hypocrisy and science to sophism.

Water was known from the beginning of the human race as a dietetic means; it was the most natural drink when art had not yet supplanted nature. We find it in the Bible mentioned with bread as a nourishment, and see it given to the stranger as a refreshment, and used in health and disease. Moses recommends affusions and besprinkling. The river Ganges was worshipped, and the river Nile was, with the Egyptians, a god, who fertilized women and land. In the debates of the Egyptians with the Chaldeans the Water-god was triumphant over the Fire-god, because the former strengthened health and cured disease. The æsthetic Greeks, who com-

bined beauty of the body with strength, esteemed water highest. Homer already mentions the bathing Nausicaæ, the bathing Agenor, the cure of the wounded Hector in the river Xanthos; and Theocritus speaks of a river-bath of 240 girls. Hercules, the divine protector of the Thermes, is represented with a lion, out of whose mouth water is pouring on him, and when he was worshipped, fluids were poured over his statue. The law of the Spartans sanctioned the bathing of children, women and men in cold water; and Pindar says: "Water is the best thing on earth!" An old Greek proverb says: "Water washes away every evil!" The women of the Macedonians had to bathe in cold water after parturition. The Scythes had a law to bathe daily in cold water. The old Italians immersed their new-born children in rivers. and the old Romans bathed much in cold water; the same did the old Germans; they worshipped in groves with springs, and their new-born infants were washed in the Rhine, as Claudius says: "Natos explorat gurgite Rhenus." Pythagoras, (530 before Christ,) recommended the use of cold baths to his disciples for the strengthening of the mind and body. Hippocrates, (450 before Christ,) the founder of the medical science, went into the Temple of Æsculapius and saw that cures were produced by fluids. He contended that cold water makes warm, and warm water cold; he knew of affusions and frictions. Warm affusions produce sleep; in fainting, cold affusions are useful. He treated tetanus with cold affusions; suffering in the joints is alleviated and cured by affusion. He recommends, for some, quiet in the bath, while others

should be quickly poured over with water and rubbed. He recommends the use of cold water in jaundice, hypochondria, rhoumatism, paralysis, tumors, ulcers, gout, fevers, inflammation of the lungs, consumption, &c. He even recommended the bathing-sponge. Herodicus (430 before Christ) also recommends bathing connected with rubbing, for the preservation, strengthening and restoration of health. Dionysius, a Cos, condemned the use of co'd water except as a drink in fever, which the disciples of Chrysippus, a Cnidus, (340 before Christ,) also rejected. Erasistratus, a Cos, who, in founding a new system, paid particular attention to dietetics, denounced these innovations, and tried to regain for cold water its importance; he recommended the application of a cold wet sponge to the head in siriasis, or sun-stroke. In Rome, water was freely used, and Lucius Tarquinius Priscus seems to have built the first bathing-houses, which became general after Appius Claudius (312 before Christ) had constructed the Aqueduct.—Asclepiades (90 before Christ) began now a new era; his maxim was to heal with certainty, quickly and pleasantly; diet and exercise were his favourite means; and although he introduced the use of wine in medicine, he got the name of Ψυχρολούτης, in consequence of his zealous recommendation of cold bathing. He used cold water in diarrheas.—The cure of the effeminated Emperor Augustus, (who shunned every exposure to air, and exercised sitting in a dry tub, who lived in chambers, the walls of which were covered with fur, and used only warm baths,) by Antonius Musa, (10 after Christ,) of consumption, by means of

cold water, gave its use a new impulse, and procured for physicians for the first time a distinguished position. Horace tells us that Musa used cold douchebaths, and cured himself by their application. [Even at that time the cold-water-cure had its enemies, for Dio Cassius makes Musa the reproach that he killed Marcellus, the son of Octavia with his cold baths, which was an untruth, because Marcellus died in the warm-baths of Bajæ.] Eudemus went farther yet, he recommended cold water injections in pains of the stomach.

But Celsus, (23 after Christ,) whose deep researches and scientific observations have always been justly admired, above all others praised cold water as the greatest dietetic and therapeutic means. He recommends it in eructations, (Lib. I. c. 2); weakness of the head, (c. 4); blear-eyes, catarrh, swollen glands, (c. 5); weakness of the digestion, (c. 8); pains in the abdomen and joints, (c. 9); plague, (c. 10); acute fever, (Lib. III. c. 7); slow fever, (c. 9); insanity, (c. 18); somnolency, (c. 20); epilepsy, (c. 23); jaundice, (c. 24); headache, (Lib. IV. c. 2); paralysis of the tongue, (c. 3); spitting of blood, (c. 3); lung diseases, (c. 7); cholera, (c. 11); dysentery, (c. 15); lientery, (c. 16); tenesmus, (c. 18); diarrhaa, (c. 19); uterine disease, (c. 20); pollution, (c. 21); gout, (c. 24); as a means to stop bleeding, (Lib. V. c. 1); in wounds, (c. 2); in the bite of a mad dog and hydrophobia, (c. 27.) He uses it as a drink, washing off, baths, affusion, and besprinkling.

The Christendom, which originated at this time, sanctioned the use of the river-bath by its baptism, as a repetition of the Egyptian divine worship of the

river-god in another sense, while the highest refinement of Rome required river and rain-water for baths.

Charmis, (60 after Christ,) who permitted cold baths even in winter, which Seneca enthusiastically used and praised, (for which this philosopher was called Ψυχρολούτης,) gave another impulse for the use of cold water.

We find now the founder of the eclectic school, Agathinus, (80 after Christ,) denouncing warm baths, (the consequences of which he considers to be debility and excitability,) and praising cold baths, with which he connects rubbing and douches. Archigenes, Arctaeus and Soranus, strongly recommended after him the use of cold water; and Herodot (117 after Christ) complains of the neglect of cold bathing in Rome, and recommends swimming.

In consequence of the progressing effeminacy of the Romans, and of warm affusions and rubbings, the use of cold water was nearly entirely forgotten, when Galen, (130 to 200,) the man of authority of so many centuries, the founder of Allopathy, whose doctrines now, as well as formerly, are prevailing, began again to apply cold water according to certain indications.

After Galen, we find only a few eminent men up to the tenth century. We know that Cælius Aurelianus (210) liked cold immersions, that he applied cold washings in insanity; cold affusions and douche-baths in paralysis; affusions in dropsy and diseases of the bladder; cold compresses in hæmorrhage; that he recommended, generally, cold water in inflammation of the brain, headache, cramps of the stomach, jaun-

dice, epilepsy, gout, colic, cholera, chlorosis, consumption, pollution, hydrophobia and aphonie. We also know that Aëtius (543) used cold water in fever, blennorrhæas, difficulties in menstruation, fluor albus, loss of smell, insanity, siriasis, seminal weakness; that Alexander de Tralles (570) cured gastric and bilious fevers, gout, and hectic fever with cold water; and Paul, of Ægina, (670,) praised cold water in siriasis, diseases of the eyes, weakness in the urinary organ, colic, &c.

From this period the study and tendencies of physicians became more and more artificial; they hunted for new theories, sophisms and remedies; the different branches were cultivated by different men, yet the whole remained what it was with Galen.

Thus we see water applied in the times of strength and natural health as a refreshment and purifying means; in the times of friendly Greekdom as a beautifying means; in the times of effeminacy and disease as a strengthening remedy of mind and body. It was in the beginning a merely diatetic means, but became soon a therapeutic remedy. It was used in the beginning in the most simple manner, but was by and by applied in different forms. The greatest and best men recommended it, but soon enemies arose.

The period of the Greeko-Arabian physicians, which now follows, is little distinguished as regards the medical profession, whose whole aim was to enrich chemistry and pharmacology, and to introduce new remedies. Although every now and then a great man would make his appearance, and, like

Ishak ben Soleinan, (940,) point at dietetics and the free use of cold water as a necessary means to redeem the sinking human family, the Greeko-Arabian physicians forgot entirely the use of cold water, either as a dietetic or therapeutic means. They revelled in the mass of new drugs, and in the darkness of monks' medicine, there was no ray of light to guide the unhappy victims of ignorance and prejudice. Faith and superstition supplanted science, and the wisdom of the preceding centuries was devil's work; physicians were now of course despised and persecuted, which led to a breach between the medical science and hierarchy to the great advantage of the former. But water had become so much out of use that, according to a law of the church, (1287,) the person to be baptized was not any more immersed into the water, but his head only besprinkled with it. The leprosy, originating in the time of the crusades, compelled the sufferer to the use of baths again, but they were warm ones, as also were the bride-baths before marriage, and the baths of men who were to be dubbed knights, &c. Even these warm baths were done away with, as they helped to spread effemination, immorality and lues. But bathing belongs so much to the instinct of all created beings, that no influence whatever was strong enough to subdue the wish for it. This then, after common water had been entirely forgotten, led to the use of mineral-springs. In the middle of the fifteenth century we see Savonarola using the expression of duccia, by which he signifies the artificial imitation of the natural spout-baths of Italy, and recommending earnestly the use of cold

water in a great many afflictions, viz: mortification, hæmorrhages, weakness of the eyes, &c. He cured the Margrave Nicolaus d'Este of gout by cold affusions.—Savonarola was followed by some great physicians, among whom Kardanus is remarkable on account of his theory of the general effect of baths. Ternelius, in the middle of the sixteenth century speaks of the cooling and warming after-effect of cold baths, and recommends them in consumption.

Paracelsus's (1517) great genius was destined to struggle successfully in medical matters, like his contemporary Luther in religious things, against the superstition, mysticism, necromancy, chiromancy, astrology and alchymy of his age, which was prepared for this step by the discovery of the art of printing, by the transplantation of Greek learning, and by the discovery of America; he founded his system upon independent study and observations. Physiology was the basis of his theory, the healing power of Nature the basis of his practice. And although he did not write in praise of cold water, he at least recommended it as a dietetic means, and as a therapeutic in hydrophobia. Among his followers, I mention Amatus Lusitanus, (1562,) who recommended the use of cold water in gastric and bilious fevers, in cholera, enteritis, sore breasts, tumors and ulcerations. In 1608, Henricus ab Heers effected a remarkable cure of leprosy by cold douche-baths. Ludwig Septala (1638) advises the use of douche and drop-baths in siriasis, headache; drinking of cold water in diarrhæa, and cold compresses in colic, and the use of cold water in hæmorrhages. Hermann von der Hevden, (1643,) supported by his own experience, praises cold water above all other medical means, he calls it a blessing of God, ready for the rich and poor. He recommends it enthusiastically in megrim, insanity, paralysis, hoarseness, pain in the shoulders, constipation, dysentery, and has cured in a dysentery-epidemic three hundred and sixty patients. The Emperor Maximilian I. cured himself of dysentery, after he had been given up as incurable, by drinking of cold water. Sylvaticus, Diemerbræck, Mæbius, Vittie, Bartholin, Van Helmont, and others, lived up to the end of the seventeenth century, and recommended the use of cold water more or less in health and disease.

The bold Englishman Floyer (1649-1714) gained what all his predecessors with care and caution tried to achieve, at one hit, by publishing his Psychrolusia, a work which, in the course of about thirty years, saw six editions. Floyer's endeavours were crowned with astonishing success, for men like Bayonard, Pitcairne, Browne, Blair, Wainewright, Fuller, Smith, John Hancock, followed enthusiastically his footsteps and achieved wonders. But George Chevne already complained, 1725, of the neglect of baths, which he considers in a house as necessary as the dining and sleeping-room. Richard Mead condemns all warm bathing, and advises the use of cold immersions in insanity, palsy, St. Vitus's dance and hydrophobia. Bærhaave, who compares the effect of cold water with intermittent fever,\* and his great disciple, Hunham,

<sup>\*</sup> The great Borhaave, whom every physician cannot help but to mention with the deepest veneration, with a host of other very emi-

calls the strengthening effect of cold water miraculous, and recommends its use in rickets. Thomas Short, 1750, praises cold water in general, and particularly in hydrophobia. Lucas (1750) says, that water is a general medicine, useful for every one, and for all acute and chronic diseases, if adapted to the circumstances. He is the first of all who mentions the enveloping in a bed-sheet dipped in cold water, which was applied to a sufferer eighty years old. William Buchan deserves great credit for his exertions in trying to convince parents of the necessity of bathing their children in cold water, and to overcome the prejudices of the nurses against this bathing.

In Italy lived about 1724 a Capuchin, Bernardo, who had formerly studied medicine. He was renowned throughout all Europe on account of his miraculous cures. He used ice water for drink, injection, compress and washing; his objects were crises by skin, urine and stool. Nicolo Crescenzo, (1727); Dalli, (1727); Lancisius, (1700); Todano and Sangez, (1720), cured diseases by the use of very cold water. Todano, for instance, contended that every disease could be cured by the use of cold water. His treatment was downright cruelty. Water was not cold enough. It had to be mixed with snow and ice; the patient had to drink every three hours, five pounds; if he quaked with cold, he was not to be

nent men of all ages, recommends cold water, and urges its application strenuously in hydrophobia, and yet notwithstanding this, and that I have, myself, cured a case in this country, every devil's stuff is used instead of cold water.

covered; cold and hunger were necessary for the cure; the patient got only the yellows of two to four eggs to eat, and if he could not bear the cold, cold wet compresses were put on the liver and thighs; fainting, sopor and other dangerous symptoms do not hurt; we have only to cease drinking, to sprinkle water in the face, to give snow in the hands, and to put it on the feet; to apply to the head and other painful parts, wet, cold compresses, and in the highest degree of sopor, to lay ice on the pit of the stomach. Parturient women have to put ice and snow on their thighs, and infants to take four ounces of cold water during the day after birth. Sangez put a fever patient, if he was in a dangerous condition, entirely naked into a double bed sheet, hung up on its four ends, covered and surrounded him with snow, and then swung him about till he sweated, while he drank freely of ice water.

This abuse of extreme cold, instead of calling forth the sympathy of other physicians led, of course, to the other extreme, and produced enemies against

cold water.

In France it was an impostor, Barbereau, who sold common water, bottled and sealed up for high prices as water from the eternal fountain. His fraud was afterwards detected, and water acknowledged as the best dietetic and therapeutic means on earth. In 1721, Geoffroy, president of the medical college in Paris, put the question: "whether water was a preservative against the plague?" which was AFFIRMATIVELY answered. Geoffroy himself contended, that water was useful in all diseases generally, and

in particular, specific in every one. Its only fault was that it was too generally known, and on that account too little esteemed. Noguez, (1725), and Peter Chirac, (1735), were celebrated for their water cures.

Barrère, (1755), brought from his travels to Guiana, the infallibility of cold besprinkling in lockjaw of children. Raymond, of Marseilles won, 1755, the prize which the Academy of Dijon had put on a treatise about the effects of common baths.

Tissot, in the latter part of the eighteenth century, spoke in words of thunder to the public, and recommended bathing to every one. Tissot, Pomme and Rob Whytt were the originators of the cooling treatment in chronic nervous diseases. The Academy of Bordcaux, in 1767, offered a prize for the best treatise on the effect of bathing, which was awarded to Marteau.

Unsenius observed accidentally the cure of Danish soldiers and sailors, by immersions in cold water, after they had, in delirium, thrown themselves into the Baltic Sea. Karl, the private physician of the Danish king says, that he too could not comprehend the wonders of this universal medicine water, till he himself had tried it on the healthy and sick body.

Moneta, private physician of the king of Poland, recommended cold water in catarrh, coughs, hoarseness, sore throat, &c.

In Germany, we find T. G. de Berger, (1700), Wolfert, Burghardt, Vitus Riedlin, (1700), Wolfgang Wedel, (1721), Crause, Fick and others, recommending the use of cold water in health and disease. These were followed by Fr. Hoffman, who, after having

looked with the greatest contempt upon water, by and by, became its most enthusiastic admirer; Schulze, Sehwertner, Sommer, van Swieten, Beer, Krueger, Boerner, Daniel, Danter, Triller, Leuthner, Pietzsch, Unzer, &c.

Joh. Sigmund Hahn, (1696—1773), created a kind of water-eure system. He recommended the use of water in all diseases, for every one. His book, "Unterrieht von Kraft und Wirkung des kalten Wassers," (Instruction of the power and effect of cold water,) which had four editions in one year, (1783—84), has done immense good to suffering humanity. He already recommends the application of water in all its different forms.

Surgery, about this time, took hold of water, and attained by its application the greatest improvement. Here, Schmucker, (1786), and Theden, (1797), deserve our deepest gratitude.

We enter now a period in the history of the human family, where all the preparatory preceding ages produce their effect in revolutionary efforts of every kind. It cannot be denied that the struggles of this period tend to the discovery of truth in life and science. This struggle must be successful, for truth is mighty and will prevail. But there are the cunning devices of enemies, nurtured and grown old in vice, guilt and pride, to be contended with; there are the pretended friends of truth, with their arrogance and villany, whose only aim is gratification of their selfishness, to be exposed; and there are the callousness, and the quiet resignation of those who are fed with superstition and reverential awe, and whose stupidity is to them a happy feeling of repose, to be

roused. This is the same in the moral and physical world. The real friend of truth is persecuted; and he has to arm himself well, if he will not be destroyed by the avalanche of opposition, he rouses among those, whose interest it is to keep the mass in stupid content with their existing condition. But then here, truth again stands at his side; she gives Herculean strength to his arms; she imparts to his eye that divine spark which makes his enemies tremble; she surrounds his heart with steel which no weapon of malice can penetrate; she prepares the balsam to heal the wounds which the insidious tooth of the poisonous viper inflicts; and thus truth, with her champions, will triumph in the struggle of life and death against her enemies.

Although the book of John Hahn made a great stir and was generally bought, it required some other stimulus to bring water into use as a remedial agent, with the generality of the public. The irritating system of Brown began to appear; and in direct contrast to it affusions were used in typhus, scarlet, and other epidemic fevers. William Wright had, as director of the military hospital at Barbadoes, observed the excellent effect of a cooling treatment in exanthematic and similar fevers, and himself, when he was attacked by a malignant nervous fever on board of a vessel, (1777); tried cold affusions, which he repeated as long as there were any fever symptoms. He saved his life, and communicated the result to the London medical society, (1779). Jackson recommended this same treatment 1791. Brandreth and James Currie, equally great as men, and as physicians, made more successful experiments with these affusions, when, 1787, in Liverpool, the typhus broke out. His success in these and other fever cases prompted him to publish his experience on the treatment of acute diseases with cold water, 1801. This work was translated into the German language by Michaelis in the same year.

Gregory, Falconer, Dymsdale, Nagle, Home, Brown, Mortineau, Marshall, Cochran, Simpson, Robertson, Davidson and others in England, and Mueller, Brandt, Mosman, Frank, Hubertus, Kolbany, Schmidt, Hirsch and others in Germany, recommended water-treatment in all acute diseases, and showed, by their own practice and its result, the immense superiority of the water-treatment to any other.

The increase of literature on this subject, and the general exertion of public and private bathing places at this period, proves clearly the tendency of the time. But I do not consider it necessary to enlarge here further on the progress of water-cure towards its final formation into a regular system; for, although it might be interesting to some to follow it up to the present time, it could not contain, in reality, any thing else but names, which are easily reached by looking over a well completed catalogue of books. I only remark here, that we stand now on the point. towards which every unprejudiced and philanthropic eminent physician has tended; and towards which the whole history of the healing art points-the period of a scientific structure of the hydriatric system, which Pricssnitz's genius founded and extended to the cure of every disease at all curable.

## OF CHILDREN FROM BIRTH.

Section 1.—As it is the principal object of this book to show, how future generations may be made more healthy than the past and the present, by a more natural and thus better mode of treatment and education, I must begin at the birth of the child, for it is as early as birth that maltreatment and abuse begins, and the seeds of disease are deposited. Indeed the life and habits of their parents, particularly of the mother during pregnancy, have an immense influence upon the child, but it is not my intention to speak of them in the present work.

Every animal organism must go through a series of developments prescribed by nature, and which, if allowed to proceed, without interference from artificial and unnatural means, will always lead in well formed and healthy bodies to right results.

It is all-important to the future happiness of any human being, that it should be permitted to pass through the different stages of infant life unimpeded by the obstacles which prejudice, fashion and false science, or ignorance too often throw in the way of its development; we should, therefore, beware of thwarting the workings of nature by presuming in our short-sightedness, to be wiser than she.

The first scream of the child is not a sound whereby to proclaim its existence, neither is it an appeal to its parents for welcome or protection; it is not an expression of complaint or of pain; it is caused simply by the necessity of exercising a new function, which comes into play at the moment of its birth, the necessity of drawing its first breath.

Section 2.—The art of breathing is immediately connected with the CIRCULATION OF THE BLOOD, for, as before birth, the child was supplied with blood from the mother through the umbelical vein, so it is now supplied from the mesenteric vein.

Through the expansion and excitement of the lungs, effected by the first breathing, the blood is attracted to these organs. The pulmonic artery leads the blood from the right ventricle of the heart in great quantity to the lungs, and the pulmonic veins lead it again back in the left auricle of the heart. While this deviation of the blood circulation from the preceding course is perfected, and the heart is put into its full activity, and while thus the blood is driven out of the right auricle into the right ventricle, and from here into the lungs, thence back again into the left auricle, from here into the left ventricle, and from here into the aorta; the preceding road is more and more closed, the foramen ovale, or passage communicating between the right and left ventricles is contracted, and closes by and by entirely.

Soon after this first development has taken place, the child, by the motions of its tongues and eyes, manifests a desire for nourishment; for, although it has yet no teeth to chew, it can swallow perfectly well. The saliva is very deficient, both in its nature and quantity; it is imperfectly mixed with the nourishment. The stomach is very small, and can only receive a small quantity of food at a time.

Section 3.—The digestion of the infant is very slow, because the muscles of the stomach are as yet weak, and the membranes very thin; the stomach is also very slimy, and lacks the power to decompose nourishment. Hence it is very wrong to urge the child immediately after birth to take the breast, or to burden the stomach with thick, fat milk, and slimy and sweet drinks.

The intestines of an infant are not only very thin, but filled with a tough, dark-green matter, the removal of which is usually effected by nature without any artificial help; but if any obstruction take place, one or two daily baths, with a few teaspoonsfull of cold water for drink, will be sufficient to accomplish its removal. The gall, accumulated during the last months before birth, now flows in great quantity into the duodenum, excites the whole intestines to contract, and thus purges them (if not artificially interfered with) of their contents.

The light colour of the stools in infancy, due in part to the white food of the child, sometimes causes a groundless apprehension of liver disease, which in reality is of extremely rare occurrence for the first eight years and even later. The liver has not naturally, at an earlier age, that activity of function which renders organs liable to disease.

Section 4.—The KIDNEYS and BLADDER are very imperfect. It is not till the sixth month, that the urine begins to get its yellow colour and peculiar smell.

The SEXUAL SYSTEM is entirely inactive.

The muscles, with the exception of those for sucking, swallowing, crying, closing and opening of the mouth, are not yet completely formed, and the bones are not firm. The most difficult part of infantile development relates to the muscles, and the balance of their action. The disproportion between the extending and contracting muscles continues for a long time after birth, and infants lie nearly always in a crooked position, because the flexors or bending muscles are stronger than the extensors. Hence they frequently become crooked, and the child crippled, by an improper mode of carrying it on the arms, or by too early use of the limbs.

Section 5.—The nerves are comparatively more active than at later periods; infants are therefore very sensitive and excitable. The mass of brain of an infant is far larger in proportion than that of a grown-up person. This gives the predominance in the infantile organism to the functions of the brain and nerves.

The brain of the infant, softer than that of the adult, shows less apparent difference between the external grey or cortical, and the marrow, or nerve substance; the first looks less grey, and the other less white. The pia mater appears very rich on vessels, the blood vessels are very full of blood, and the brain is interwoven with a great many smaller blood vessels.

sels; thus often, when we open the scull, the brain may appear inflamed, and yet is in a perfectly healthy state. The cerebellum has not nearly the development of the cerebrum.

The SKIN is very spongy and far more porous than in adults. It is a most delicate film, covering a mucous tissue full of nerves and vessels: its sensibility renders it liable to eruption from the slightest irritation, as externally from want of cleanliness, or internally, impurities of the blood, or the bad quality of the milk from which that blood is formed.

The infant, however, well endowed by constitution and temperaments, cannot make a perfect body out of bad materials. It tends essentially by its own organic forces to a certain character of development, but the degree to which it attains that character, depends on the favourable or unfavourable adaptations which it finds in the outward world. Thus in regard to the character of organization, one child tends by its essential constitution, its vital inheritance to be tall, and another short, one fat, another spare, one full of blood and animal spirits, gay and sanguine, other concentrated, reflective and more active by the head than by the hands; and all these vital characters may be healthy, or they may be morbid according as circumstances have favoured or compromised the peculiar and specific course of their several developments.

The GLANDULAR OF LYMPHATIC SYSTEM is very active and prominently developed after birth, in connection with the chief importance of the nutritive functions, as the chyle and the waste matter taken up from all parts of the body, worn by use, pass through such

changes in the lymphatic glands, as qualify them to form fresh blood, and to nourish the tissue to which they are carried. This early development and activity render the glands peculiarly liable to diseases in infancy, and concur in the production of scrofula in its various forms.

Section 6.—As each part of the organism of the child differs from the corresponding part in the adult, so it is in the relations of these parts, as in the three great vital functions: nutrition, sensation and motion. Hence the quick and violent sickness, and easy exhaustion and death, as well as rapid recovery of an infant.

Section 7.—What has been said in the foregoing paragraph is only a very imperfect outline of nature's own process. Now, what have we to do, taking the child at the moment it enters the visible world? We must first of all remove from the child everything which might exert an injurious influence upon its life and health, or hinder the natural action of its lungs in breathing, its skin in transpiring, its stomach and bowels in digesting.

First, we must remove the blood and slime from the mouth and nose, then the whole skin is to be carefully cleansed of this coating.

The little being, slippery as an eel, must be received in a napkin, clasped round the neck, and its head supported with one hand, while both legs are firmly grasped by the other. The nurse should receive it in a napkin from the hands of the midwife,

and proceed to cleanse it with a soft clean sponge and water, at about 70° to 72° F., which may occupy from eight to ten minutes. In cleansing the child, great care should be taken Nor to smear the sponge in its mouth, eyes and nose, after applying it to other parts; troublesome inflammation would be caused by the contact of the acrid slime. This sponge must, for the same reason, not be used a second time, but a fresh one procured.

The tub in which the child is washed, must be large enough for its body to be entirely immersed during the sponging, otherwise the operation is liable to cause colds, besides being more unpleasant, as the water would then touch continually new parts.

When completely cleaned, the child should be gently and briskly rubbed with soft dry linen, wrapped up in some linen cloths, and put in bed by the side of the mother, for the warmth of the mother is the most congenial to the infant. After a while (two to three and four hours, according to the reactivity of the child,) it is again to be quickly washed off and dressed. Thus cleaned and lightly dressed, the child ought to be brought to the mother, who is, during this time also washed off, the second time,\* when she may give it the first nourishment.

I know that I shall cause some tender parents to shudder at the idea of putting their new-born infants into water, almost thirty degrees below the heat of the body for so long a period as ten minutes, but it

<sup>\*</sup> N. B. Every mother ought to be quickly washed off with wet towels of about 72° F., immediately after the birth, and then sleep and perspire for an hour or two, and then washed with water of 70° F.

must be remembered that this water is no colder than the air of the chamber in which the child must now live, and that from the moment of breathing, a new and powerful agency of generating heat within its own body is conferred upon it, in the combination of the oxygen of the atmosphere with its blood in the lungs.

The reaction from the slight chill of this bath will then assist it in supporting with infinitely more safety the temperature of the air which, though a less rapid conductor of heat than water, is constant or permanent in its action.

Section 8.—The first screaming is already mentioned above, and should never be suppressed or interrupted by any means, because it ought to last till all the air-cells of the lungs are expanded and filled, and thus the perfect transitus of the blood is made possible. The crying and screaming afterwards is quite a different thing, and we should always try to find out and remove its causes.

Section 9.—In cases of difficult parturition, when the infant may be born apparently dead, we have to distinguish between the cases of fainting and apoplexy, on account of the treatment:

#### A. Fainting Fit.

This is to be presumed, if the birth has been a very difficult one, particularly a foot-birth, if the mother had lost before, during, or immediately after delivery

a great deal of blood; if the infant itself had lost much blood by an injury of the umbilical cord; or if it had lived some time after birth, and afterwards ceased to breathe in consequence of weakness. The face and body look generally pale, and the lips blue. In such a case, we should not tie the umbilical cord, but wrap the child in warm wet clothes, and keep it in mother's lap till the after-birth is loose; we put it then with the placenta, in a tepid bath of 75° F., rub the chest, spine and extremities well, and sprinkle the head, chest and legs with cold water till life returns with motions of the mouth, pulsation and warmth, and finally respiration. After that, we put the infant in clothes, and lay it by the side of its mother.

Rem. We may suppose such a feeble and exsanguine state, that there would be even not sufficient reactive power to allow the use of cold sprinkling except for a moment, and in a very slight degree. Here, my respected friend, Dr. Lazarus, proposes a means for a chief reliance which I, from all my heart, recommend not only on account of its originality, but also of its perfect rationality.

"Close to the pit of the stomach a piece of fine flannel cloth is placed, the operator presses his mouth firmly on this, and blows through it; the intense, penetrating and vital heat thus produced, may stimulate the epigastric centres ———; after this, the operator is to place the thumbs and ends of the fingers of one hand upon the forehead, just between the eyes, expressive of the direction of nervous influence to the brain, and establishing an equilibrium between it and the ganglionic system previously excited—

with the other hand gentle frictions are to be made, from the back of the head all down along the spine."

#### B. Apoplexy

Is easily recognized, the face of the infant is then very red, blue, or even black, the vessels of the head are swollen, pulsation hard, eyes driven out, respiration snorting, with froth on the mouth, heat on head and chest, want of sensibility and motion. On the body we find often blue spots.

In this case we cut, as quickly as possible, the umbilical cord, after tying it about two to three inches from the body of the infant, put it in a quite cold bath up to half of the chest, pour water over the head with a small watering pot, rub the chest and extremities well, excite the throat by tickling with a feather to vomiting, and blow, but very carefully, air in the mouth and nose of the infant. When life returns, we ought to put the child in somewhat warmed linen, and when it begins again to show some disorder, in a half bath as above, rubbing constantly, especially the extremities, till every sign of the attack has disappeared.

## C. Swelling of the Head of the Infant

Is a kind of a tumor which originates in consequence of difficult, long lasting births, during which the head, on account of mal-formation of the pelvis, of insufficient labours, of too small a mouth of the uterus, of resistance of the vagina, or of the instruments used in such cases, is pressed, and on the spot

where this pressure has taken effect, a colourless fluctuating tumor forms.

Compresses, consisting of small fourfolded pieces of fine linen, wetted and well wrung out, put on such spots, and renewed every quarter of an hour, are sufficient to remove this evil entirely in a few days.

## D. Bloodswelling on the Head of the New Born Infant.

This kind of tumor is frequently confounded with the preceding. It has its seat on the crown of the head, mostly on the right side; makes its appearance particularly on rhachitic and scrofulous children, and is distinctly circumscribed. The tumor is generally very small in the first twenty-four hours, extends slowly on the third and fourth day over its basis, is elastic, afterwards moderately flabby, hot and bluish coloured. If we examine it more carefully on its basis, the bone seems to be rough and enlarged, but this is not the case; the touch deceives us, and we are led astray by the sugillation of the circumscribed fibrous skins of the skull.

We disperse this tumor in twelve to eighteen days by putting over the head a six-folded piece of wet linen, over which a bladder filled with very small pieces of ice is laid, keeping it tightly fixed there by a cap of oil silk. The infant must, besides this, be washed three times daily in a bath tub, with water of 70° F., and its bowels kept in order by proper nourishment, drinking of fresh water, and in case of need, by injections.

Section 10.—The nursing of an infant is the duty and the greatest pleasure of every good mother. Immediately after the functions of the uterus have ceased, the breasts begin to swell and expand, in consequence of the concurrence of juices towards them. The omission of nursing by the mother has produced many an awful death; there is no excuse but positive impotence.

In stating this as a general law, it is necessary for the child's sake more especially, to mention that idiosyncrasies or peculiar constitutions really exist where the milk of the mother, even though in the apparent enjoyment of health, acts as a poison upon the child. A remarkable instance of this occurred in a friend of my own, a decidedly spiritual and intellectual lady of excellent organization, alternately and at pleasure a visionary dreamer, and an earnest, practical, working character. Her temperaments are chiefly nervous and lymphatic, the nervous predominating. She was extremely desirous to nurse her child, had plenty of apparently good milk, and was enjoying her full health; but the child showed great uneasiness whenever it took the breast, and always cried afterwards, as if with severe cholic, which was never the case, when it was fed by the hand with cow's milk mixed with water and some sugar. After two months, and having exhausted her ingenuity in accounting for this in every other way, the mother reluctantly gave up the office of nursing her child. which afterwards thrived much better.

The assertion, that nursing of an infant makes the mother look old, is a fallacy. It is only when the

body is destroyed by an unnatural mode of life, by turning night into day, by breathing an artificially heated atmosphere, by eating and drinking improper and stimulating articles, by using so called cosmetics, and when the mother runs foolishly into the dissipations of fashionable society. If, however, the mischief be already done, if in consequence of ignorance, carelessness, or some fatality, the mother has become an invalid; it is now too late to stimulate health, or to usurp its functions. Every precaution is to be taken about relieving the turgid breasts, and the best, when women have enough sense and natural feeling to admit it, is to suckle some young animal, as puppies, which I have known women do at the same breast with their own child. But for the child, already compromised in its life by its mother's ill-health during gestation, the only reparation should be sought by grafting it on a robust and healthy nurse.

As soon as the mother and infant have been cleaned and rested, the mother, two to four hours after birth, prepares her breast by washing it with tepid water, and moistening the nipples with her own milk, for the pleasure of nursing her own child, which she does best in the first three days lying on her side.

Difficulties in this respect should never discourage the mother, for perseverance will set every thing right. If the breasts are not yet quite qualified for the purpose, she must put the child oftener on; and if she has a superfluity of milk, she must only rub the nipples well, and put dry warm linen over, which is to be renewed when wet.

The best means of overcoming the pains which the

sucking of the child produces, is for the mother to lean firmly against the back of a chair, slightly to press with her hand the head of the child to the breast, and patiently bear the momentary pain which will get less every time.

If the nipples are sore,\* I recommend that a piece of soft old linen fourfolded to about the size of the hand, be wetted in water of about 60° F., and put over them, covering it with dry linen, and renewing the wetted compress as soon as it gets dry.

But should the breast begin to look dark, hard, uneven and knotty, then large fourfolded pieces of linen covering the whole breast, wetted and very well wrung out, are to be put over and renewed when dry, till every sign of disorder has disappeared. The covering over these cataplasms must be kept dry. This treatment, when connected with spare diet, has been perfectly sufficient even in the worst cases of real suppuration.

During the period of nursing, the mother should be very careful in her diet, eating only pure and unspiced food, drinking nothing but water and milk, should avoid every disturbing passion and excitement, and take daily "Abreibungen,"† with water of 65° F., or, if the nervous system is strong, daily plunge baths, in

<sup>\*</sup> If the mother, during the last three months of her pregnancy had, repeatedly every day, washed the breasts with slightly tepid water, and the nipples with cold water, this soreness would have been avoided.

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<sup>†</sup> Rubbing off; a large linen sheet, dripping wet, is thrown over the person, over which she is well rubbed, and then carefully dried off.

about 68° F. water. These baths may be taken gradually colder.

Rem. There are doubtless peculiarities of constitution to which, at least, amid the other artificial habits to which they are enslaved, water of a higher temperature might prove more salutary. Whilst, however, I avoid dogmatism, let me entreat my fair friends not to confound their own timid fancies with constitutional indications, for the cases are really rare, in which, after a week's initiation, water of the temperature above mentioned cannot be taken with benefit, and even with pleasure, provided the immersion be short, and the subsequent friction rapid and thorough. On the effeminate practice of warm baths, follow catarrhs and many other evils.

Section 11.—There are some cases in which the mother ought NOT to nurse her child, viz., if she is suffering under very great nervous debility, from a disease which we had reason to fear might be imparted with the milk to the child, or from diseased ulcerated breasts and nipples; or if there be a total want of milk, or the quality of it poor.

In cases where the mother has milk, but in which her ill-health renders it poisonous, it may be removed by the simple cupping apparatus, commonly known, until the flow gradually ceases, and the breasts resume their natural state as before pregnancy.

I would, under such circumstances, always recommend the employment of a wet nurse, because the milk of a woman is always preferable to the milk of an animal. But this wet nurse must be perfectly healthy,

should have given birth to her child at nearly the same time, and be a person naturally fond of children, and conscientious in the care of them, since a slight inadvertence or neglect may prove fatal to so tender a being. She should have had only a few children; the milk must be healthy and sufficient. She should have a pure breath, red lips, which do not chop, white good teeth, full round breasts, large protruding nipples, and a full body, with a clean skin.

Good milk is rather watery than thick, of a bluish white colour, free from any smell or taste, it runs easily off from a clean china plate, and poured into water, forms a slight cloud. Its nourishing power will be best judged by the condition of the child fed on it, her own child.

We must pay particular attention to regularity in nursing, regarding punctually the wants of the child, and keeping its clothing, and the articles surrounding it, constantly clean. Every service ought to be done with love and good will. The diet of the nurse ought to be simple and nourishing, nothing spicy or fat, no other drinks but water and milk, no coffee, tea or spirituous drinks, no drugs, &c., &c.

Section 12.—The new-born infant, being destitute of the power to masticate solid food, being furnished with but a small quantity of saliva, and with a stomach, not possessing proper musculous power to energetically contract, and to produce such juices as would dissolve solid substances, and labouring with a lower temperature; it is indicated by nature that it should live on fluids only. The infant, being deprived

of the power to prepare chyme and chyle, has in its stead been richly gifted with the power to assimilate, and to suck in nourishing substances. The interior coating of the thin and very long intestines shows this clearly. The imperfection of the intestines and weakness of their muscular coat, on whose contractions the passage of matters through them depends, prevents diarrhæa from ensuing on the flux of bile from the extraordinarily large and active liver. If we thus know that the infant is unable to decompose the nourishment, to transform it in chyme and chyle, and that it can only suck in chyle, we ought to give it only such substances as are already prepared as chyle, like the fluid, milk.

The best nourishment of the infant is the milk of its own healthy and sensible mother, next, that of a good nurse; but if both are wanting, we must substitute artificial feeding. As this is at least a very poor expedient, we must be particularly careful to provide the best adapted, viz., two parts of the milk of a well-fed ass or cow, and one part fresh water.

The animal must be perfectly healthy, must never have had young less than three times, nor more than six times, and the young one must not be sucking. The milk must always be fresh, the vessel clean, and the infant should not have so much at one time, as to cause that vomiting which proceeds from overloading the stomach. Sucking-bags, and sweet things are very injurious, as is sufficiently known.

By and by, when the infant is older and stronger, we begin to give well baked, dried and pure wheat bread or biscuit, softened in hot water, and mixed with fresh milk. Such food an infant should not get oftener than four or five times in twenty-four hours. From the fourth to the eighth month, we may soften the bread or biscuit in thin beef, chicken, mutton, or venison broth, from which the fat has been carefully removed by straining, without any kind of spices or vegetables. Never give a second spoonfull, before the first is entirely swallowed.

From the eighth month, we may give more compact nourishment as with weaned infants, and only fresh water for drink. After this time we ought to use the child to certain meal times, giving in the morning and evening the best bread and milk, to which a little meat-soup may be added at dinner. By way of variety, rice may be used, especially when the bowels tend to be relaxed, and rye bread or rye mush when they tend to be constipated.

When the child begins to walk about, we may add a little tender meat, and use it to taking milk and rye-bread, for morning and evening meal, although I opine, that children ought to have meat only after the second teething period. The child ought to have besides the breakfast, dinner and supper, one or two meals between them; but we must keep regular hours and take care not to over-feed it.

A new-born infant may be healthy with from two to six evacuations in twenty-four hours. The necessity for feeding oftener, and the more frequent evacuations, proceed from the less complete digestion of the infant, (the milk being kept in the stomach only a very short time,) and from the quicker peristaltic motion of its intestines.

It is known that even wind is produced in the intestines of the infant. This wind is more the production of the decomposition of the milk than of a peculiar digestive power, and gives only the smell of sour milk, mixed with the smell which warm animal parts always exhale. If the flatulence of sucking infants is excessive or have a putrid, alkaline, or other peculiar smell, we must presume that the intestines or their auxiliary organs are disordered.

Spicy victuals, frequent use of sweet things, spirits and drugs, of whatever description, are, of course, in the highest degree injurious to the growth and healthy condition of the body and mind of the child. It is too often the tendency of parents to make their joyful, merry nurseries, miserable, dreary sick chambers; and there are villains enough in the drug-guild, who, for the sake of gain, encourage this weakness of the people.

Section 13.—The nursery ought to be situated in a quiet part of the house and open to the sunshine. The room ought to be dry and large, the air pure and free from all evaporations; therefore, washing and drying clothes, firing with coals, and producing strong smells in the nursery, must be prohibited. Flowers of strong perfume are inadmissible, and no plants should remain in the room at night, as their purifying effect upon the air by absorbing carbonic acid gas, and emitting oxygen, is reversed during the period of darkness. Birds and other animals had also better come in occasionally to amuse the children, but go out at night.

It is natural to suppose that a new-born infant is very sensitive to air, heat, cold, light, sound, &c.; all sudden changes must be avoided. The temperature of the room ought to be about 68° to 70° F.; the light, at least, in the first weeks, somewhat shaded, the full ray never suffered to reach the eye of the infant, and any noise avoided. If the air out of doors is not below 60° F. we may open the windows, whilst the child is in the room; if it is much colder, it would be better to take the child away, and bring it back when the windows are again closed.

The best material to light a nursery, is wax or spermaceti, never animal oils or tallow, whose stench poisons the air; nor gas, camphine, or burning-fluid, &c., whose vapors destroy the air. (There is no doubt that the present increase of cases of diseases of the respiratory organs are, to a great extent, caused and made so dangerous by such vapors of the burning materials used now-a-days.) The lights should be elevated and shaded so as to produce an effect similar to that of the sun, moon and stars, whose glow is at once diffused and softened by our atmosphere, and which thus never dazzle or injure our eyes.

Section 14.—The child should never be bathed within an hour after nursing, and never be nursed within half an hour after the bath.

A large experience of hydriatric physicians and parents proves, that regular tepid and cold bathing is not only the best preventive of many forms of disease, common to infancy, but that, when children accustomed to bathing, got a disease, they recover very easily; and that others who have suffered from rickets and scrofula, between the first and sixth years, crippled and miserable, are entirely restored, and get healthy and blooming, through simple cold washings and baths, plain pure food, warm and loose dresses with well-aired chambers and daily out-door exercise.

When the child is about four months old, we may begin to lower the temperature of the water gradually, so that at the age of five months we may use water of 56° F.; we keep this temperature till after the period of teething. The two daily baths, given at the hours of rising and before retiring at night, will each occupy from two to five minutes, during which the whole body and limbs should be briskly rubbed.

This bathing and washing should be religiously continued, till the child grows to feel it as necessary to his comfort and self-respect, as it is beneficial to his health. It is to form a habit for his life; it is the daily renewal of his baptism, in which water was chosen as the sign of spiritual regeneration and purification, because it is actually the means of physical purification, and as it is necessary to the original constitution of all forms of organic life, so it is the universal and permanent tonic which revives and gives fresh elasticity to the vital powers.

Section 15.—The dress of the infant is to be so arranged as to prevent injury to the umbilical chord; the garment, next to the skin, often changed.

After the infant is awaked from the first sleep in which it had fallen by its mother's side, enveloped in a soft linen sheet after its washing and cleaning,we put an elastic bandage round its stomach, which should be about five inches wide in the middle, and at the ends two to three inches; this bandage ought to have three little strings on each side, four inches from the ends, with which it can be fastened in front. The remaining part of the umbilical chord is once more to be tied, then enveloped in a piece of fine linen and put flat on the stomach, over which we lay a small compress or pad of fine old linen four-fold, and over this the bandage above-mentioned, which is made elastic by the insertion in both sides of it, of a piece of gum-elastic cloth. On this bandage we fasten the napkin which goes between the legs, and protects the clothes from getting soiled; now a small, soft linen shirt, and over this again a linen tunic; thus the child is put to bed and covered lightly but warmly. Whenever it is taken up, a warm outside wrapper is ådded to its dress. Silk, flannel, woollen and cotton stuffs of every kind are to be avoided, they excite the delicate skin too much, and predispose the child to take cold easily.

A dress of the above description is sufficient for the first three months; but when the infant begins to show some muscular activity, to try to raise itself and to creep about, then we may put on short petticoats, &c.

It is always well to bring a child into the open air, if the weather be warm and dry. When it begins to

walk, we ought to support it in no other way but under the arms, with the hands.

Avoid stockings, except perhaps in the severest weather, but never garter the leg; and let the shoes be soft and fit easily.

We not only harden children by dressing them as lightly as possible, but we gain for them beauty, health, and the best development of their limbs and senses.

Tight dressing of children is a most pernicious practice, on the effects of which I need not dwell; they are known, and their results can be daily seen, viz: congestions to the head and chest, headache, asthma, catarrhs, tubercles, blood-spitting, consumption, congestions in the abdomen, indurations, cramps, irregularity, chlorosis, uterine diseases, fluor albus, miscarriages, &c.

Section 16.—The infant grows fastest in the first months of its life, in nine months about ten inches; therefore, the body requires in that period the most reparation and rest. But the farther it progresses towards perfection, the less it sleeps, and the more exercise is wanted. We have then to give the child opportunity to try its strength, and thus the growth of its bones gets its right direction, the muscles and sinews their requisite strength, and the child gains so much that by the fifth or sixth month it can crawl and sit up without support, the transitions from lying to walking.

The common chair which infants are frequently compelled to sit in, is very injurious, on account of the pressure which the lower part of the body is ex-

posed to in its hole. The same may be said of the leading-strings, the abominable baby-jumpers, and other similar contrivances.

The infant has the inclination to LIE as long as its bones and muscles are not strong enough for the ERECT position. If about the sixth month this strength is gained, the child will SIT and CREEP without any artificial support, and when by and by the whole body is sufficiently formed for walking, it will endeavour to WALE.

Section 17.—As the senses develor themselves, the child takes more notice, and shows the wish to touch and handle every thing, thus making acquaintance with the outward world, at the same time that it exercises and strengthens its tender muscles. This should be encouraged by providing the nursery with a store of such things as babies may be safely trusted with, keeping out of it small bodies that might be swallowed or cause choking, all painted toys which are poisonous when sucked, and all sharp, pointed, and other dangerous tools.

Many children are kept in a state of continual disappointment and fretting, by letting them play within reach of objects which they naturally desire, but which are to be refused them; and nowhere is there more room for a wise discrimination than in the arrangement of a nursery, even in this respect.

After the SECOND TEETHING, in the eighth year, we should give every child more suitable general exercise in open air, and we should especially teach it to SWIM. Swimming is an exercise to which the women

of the South Seas accustom their children at a very early age, and which the little ones, then void of fear, learn with the same native instinct as puppies. A gentleman of my acquaintance tells me, that he has seen the same thing of little negroes in the southern States thrown into the river for the first time. Under the care of an able-bodied and experienced guardian and in suitable locations, where there is clear running water and a firm bottom, we may avoid all risk, and confer on our children a very exquisite pleasure in the summer months, as well as an exemption from the casualties of drowning in those accidents on water so often occurring. There is, however, a reason of much higher importance, in the fact, that the motions of the swimmer exert a group of muscles which lift upwards and outwards, and expand the walls of the chest in a manner altogether peculiar, as any one may readily perceive for himself, and determine a strong respiration-circulation through the upper lobes of the lungs so as most effectually to counteract the disposition to consumption.

Every member of the body should have its share of exercise; if this is neglected, disorder ensues. For instance, children in cities are almost confined to walking, which, with weak and scrofulous bodies, often causes crooked legs, or diseases of the joints.

# On the Teeth and Teething of Children.

Section 18.—The growing of the teeth is by no means so quickly effected as many believe, but takes place very gradually, and should, therefore, not at all

be a cause of grave disturbance to a healthy infant. Already in the embryo of four or five months, the milk-teeth begin to form. In each of the jaw-bones a superficial swelling forms which is filled with a substance, first pulpy, but soon becoming bony, and gradually transformed into the crown of the tooth. The roots are afterwards organized in harmony and adaptation with an organic process of absorption, by which the hollows for the teeth are formed in the porous or spongy tissue of the jaw-bone. At the time of birth these hollows are comparatively very large, and have only very thin partitions; thus the tooth, even if it were perfectly formed, could have then no firm position. In continuance of this first process the hollows get smaller and the partitions firmer. It is, therefore, an erroneous opinion that the tooth acts like a wedge on the jaw-bone, which must be helped by cutting the gum. It is equally false that the softer coverings of the jaw-bone are mechanically driven asunder. The membranes, which cover the hollows and the gum, are absorbed by a vital process of adaptation in proportion as the tooth comes forward. For if this cutting were mechanically effected, the tooth would then lift up these soft parts for some time, the expanded parts would become inflamed, swell up and cause pains. But we do not find any thing of this kind, if we let Nature do her work without arrogant and self-complacent interference, be it from the part of old women or dentists, or both together in the form of a physician. It is only, when children have such vitiated constitutions that every organic process becomes falsified, or when

on the appearance of the teeth they are permitted, or even, more learnedly, urged to bite on hard substances, and press the delicate and irritable gum against the sharp and hard crowns of the growing tooth, that high inflammation and severe pain ensue. The mechanical, ridiculously unnatural theory, has been studiously and carefully invented to account somewhat for morbid and unnecessary conditions, and to blind the good people enough to disable them from seeing the truth. The constitutional disorders attendant on dentition in these weakly children, whose deplorable nurture is so well calculated to develop the seeds of hereditary scrofula, depict in the body of the child the corresponding disorders which occur from analogous causes in the health of the race, of which that child is a member, during the analogous period of infantile growth.

The first, or milk-teeth, which are thinner and smaller than the second ones, come forward in the following order:—

- 1. First appear in the lower jaw two front teeth, which are immediately followed by as many in the upper jaw. Soon, two more such teeth make their appearance in the lower maxilla, and then in the upper. These incisors are generally the work of the eighth, ninth, tenth, eleventh and twelfth months.
- 2. At the end of the first or beginning of the second year, the four canine teeth appear, two in the lower, and two in the upper jaws.
- 3. In the course of the second year the four anterior back teeth or grinders, and

4. At the end of the second, or beginning of the third year, the four other grinders are produced.

After these twenty teeth, eight incisors, four canine or eye-teeth, and eight grinders are perfectly formed, the first teething period is over.

Sometimes the teeth appear earlier, sometimes later, for the development of the infant may be accelerated or retarded in different ways. Some infants have been born with teeth already developed.

These milk-teeth last, or should last, till the sixth or seventh year. While in the second period of infantile life, both the jaws become raised, arched and rounded towards the front, the SECOND TEETH are forming under the short and thin roots of the milk-teeth, in separate partitions or sockets. These second teeth are larger, thicker and longer, and have longer roots than the milk-teeth. The cavities of the second teeth are gradually prolonged into those of the milk-teeth, so that the crowns of the second teeth touch the roots of the milk-teeth, which are thus pushed out, generally in the same order as they had grown.

# THE DISEASES OF CHILDREN

AND THEIR

### TREATMENT.

HAVING in the foregoing pages given an outline of the rules which should guide us through the early life of a child, in order to produce a healthy race, so far as it lies in the treatment of the offspring; and without regard to those diseases they inherit from their parents. I now come to the principal object of this book:

The Treatment of the Diseases which are Common to Childhood.

I intend to give, in this respect, sufficient advise to enable any sensible and discriminating father and mother to be, what they ought to be, not only the guardian of the soul of the child, but the guardian of its bedily welfare in health and disease, without the interference of a stranger, who may make its life the subject of an experiment, or a means of dirty gain, or drug and poison it with some scientific recipe, secundum artem.

That this subject of the diseases of children has been too much neglected is well known. The drug schools have been compelled in the last twenty years, to pay more attention to it; and though it is true, that in regard to diagnostics much has been gained, yet in regard to treatment, there remained always the old uncertainty. This deficiency is now supplied by hydriatrics, and the system, if thoroughly carried out, will produce such a revolution in education that the unnatural, artificial condition in which children were kept, must give way to a more rational course, and to a return to nature.

My own long experience and extensive practice have made me so confident in regard to this truth, that I honestly and conscientiously contend:

It is an impossibility that any person can die of any real, acute disease, be it fever, inflammation or eruption, if treated from the beginning with cold water in the right manner!

We distinguish in the diseases of children three classes:

1st. Such as may be inherent in the physical condition of a new born infant, viz., monstrosities or deficiencies in various organs, dropsy of the brain, obstructions of the natural passages, and such as originate soon after birth, viz., inflammation of the eyes, or of the windpipe, falling away in flesh, scrofula, rickets or milksap, &c.

2nd. Such as are connected with the periods of evolution of the body, and

3rd. Such as occur irregularly, or are acquired in the course of childhood.

The first class does not belong to this work; they require the attention of a physician who understands the hydriatric system well.

The second class does not require any particular treatment at all; a natural education and habits, as hinted in the first part of this book, with proper diet and exercise, is sufficient for their removal.

It is of the third class only I purpose to speak.

#### I.—THRUSH OR APHTHAE.

They make their first appearance on the tongue, on the inner side of the lips and cheeks, and follow the extent of the mucous membranes often down to the anus; they appear as small whitish-yellow pustules, which sooner or later burst, and form small round ulcers, causing burning pain, particularly if any thing touches them. Sometimes these pustules flow together, and form a large white surface, through which the little papillæ of the tongue are visible. They have very seldom a bluish black colour, nor generally any offensive smell. If this be the case, the disease is dangerous.

As thrush is very common, and infants, suffering from it, are very restless and cry much, which may lead to false views of the cause, it is well to examine the mouth of the infant every day.

The principal causes are disorders of the stomach, bad milk, heating diet, fits of anger or other painful emotions of the nurse, want of cleanliness and of bathing, heat and closeness of the bed room or nursery.

Treatment.—Remove at once the cause, bring the infant often in the open air, or at least air the room frequently, (using the precautions mentioned in the first part of this work,) bathe it twice a day in water of about 70° F., wash and clean the mouth often with a piece of fine soft linen, put round the fingers and wetted in fresh cold water; and, if there should be any aphthae in the anus, apply injections of about 60° F. At the same time, it is advisable to put an exciting compress over the whole abdomen. This and good diet of the mother or nurse, will always in a few days remove the evil.

### II.—INFLAMMATION OF THE EYES OF INFANTS.

This is often a dangerous affection, particularly if not only the eye lid, but the ball of the eye suffers. It appears generally between the fifth and twentyfirst day after birth, first in one eye, and two or three days afterwards in the other also. The period of real inflammation lasts only two to three days, with regard to redness and shunning of the light. The eve lids swell, the glands (Meibomian glands) secrete much slime, and the eye is glued up. The closing muscle of the eye relaxes, and the ball is covered with a yellow, pus-like matter. After this profuse discharge has lasted for days or even weeks, the infant grows more restless, gets fever, cries much: the inflammation reaches the cornea and sclerotica; ulceration takes place, the iris and lens prolapses, and the eye is lost. The infant frequently dies of emaciation and hectic fever.

This dreadful evil is caused by the sudden influence of bright, dazzling light immediately after birth, by washing in impure water, by washing the face with soap, by smoke, dust, principally the dust of feather beds, by using caps, the fringes of which reach the eyes, by fluor albus, or other unhealthy local secretions of the mother, by cold and damp air, unhealthy rooms, by the cleansing of the eyes with the sponge with which the infant was washed after birth, (as above in the first part mentioned,) or by its head remaining long in the vagina during birth, when the forehead and the region of the eyes is exposed to a long and violent pressure.

To prevent the before mentioned consequences, the mother must take a sitz bath of about 60° to 65° F., and clean the whole sexual parts shortly before birth; and after birth wash, first of all, carefully and cautiously the child's eyes, every day repeatedly. After difficult births where the head has suffered, we put cold bandages round the head, which we extend over the eyes. These bandages must consist of fine old fourfolded linen, always wetted in fresh, pure and cold water. They ought not to press on any part, and must be changed as often as they get warm. If the eye lids should glue together, we change the local compresses on the eyes seldomer, but do not let them get dry on the eyes.

If the skin is very red and the head hot, besides the bandages covering the whole head, the infant is to be put three times a day into a bath of about 70° F., from six to eight minutes.

Every other disorder is to be promptly removed: for instance, costiveness by injections; aplithae, by the treatment prescribed under that head; soreness, by washing and cold water compresses, &c.

The diet of the mother or wet nurse is here, as in every case of diseases of infants, a particular subject of our care. It must be spare and meagre, and the child should be seldom nursed, its thirst being rather satisfied with some water.

To illustrate this subject better, I will narrate an instance of a cure, performed by Dr. De Meyer, who has had a most extensive practice in the treatment of the diseases of children with water, and whose writings, in the compilation of this book, have furnished me with much valuable material, which I here gratefully acknowledge:

Juliana Stark was born on the 12th of August, 1845, perfect in every respect, father healthy, but mother pale, weak, scrofulous. Neither of the parents, nor the midwife and nurse had observed in the child anything, indicating any disease, in the first five days. On the fifth day, it seemed somewhat to shun the light, on the sixth and following days, first the right and afterwards the left eye was, after every sleep glued up; and on the eighth day, the eye lids were nearly constantly cramp closed, and tears running out of them, which reddened the cheeks. A drugpractitioner was called in on the ninth day, but could not stop the progress of the evil by the application of leeches, purgatives, and eye washes.

Dr. De Meyer was called on the fifteenth day after

birth, and tenth of the disease. He found the child suffering with jaundice, (icterus,) general heat, particularly of the head, both eyes closed, the eye lids very much swollen and glued up with a thick crust, and the cheeks excoriated by tears. When Dr. De Meyer forcibly opened the eye lids, both conjunctivæ were much inflamed, red and swollen; between the eyelids and the eyes was a yellow pus-like accumulation, the cornea was as if covered with a veil, and interwoven with a fine red net; there were daily two exacerbations.

The Doctor first applied compresses, (fourfolded pieces of fine old linen, wetted in cold water,) to the head and eyes, which were renewed as often as they got warm; then he had the little patient enveloped four times daily in a linen swathing cloth, wetted in cold water, and very well wrung out; from this enveloping, the child was taken out when the cloth got dry, and put into a bath of 68° F. for six minutes. In three days, the progress of the disease was stopped. The treatment was continued, the compresses and envelopings were not, however, so frequently repeated as before, and in six days the infant was well.

During this course, the eyes and cheeks were very often washed with water and milk of about 65° F.; the mother observed a very strict diet, and the infant was only nursed four times a day; it drank some sugar-water.

#### III.—ADHESION OF THE TONGUE.

Ancyloglossum is that condition where the ligament under the tongue has grown so far forward that the infant cannot suck. The surgical operation is a very simple one, and the bleeding, following this operation, may be easily stopped by a piece of linen, wetted often in cold water, wound round the finger, and put on the wound; there is certainly no other styptic needed.

#### IV.-WORMS-TAPE WORM.

We very seldom find a person entirely free of worms; children suffer most from them. The most dangerous is the *tape-worm*, on account of its growth, size, motion and voracity. The consequences are colic, vomiting, convulsions, cramps, epilepsy, emaciation and death; which last is usually produced by the application of the so-called *drastic* and *roborant* remedies of the drug-school.

If infants, with their want of digestive power are fed with strong and over-nourishing food, there will remain in the intestines nourishing matter, which not only favours the production of the different kinds of worms, but also gives them nourishment. The more pap, fat and sweet cakes the infant eats, and the more clear milk of animals it drinks, the more worms will find their sustenance in the intestines, and the more frequent will they be produced; for there, where alimental matter is exposed to the continued influence of moisture, warmth and air, the so called *spontaneous* 

generation is always effected. We find thus in children the ascarides, (ascarides vermiculares); the round-worms, (ascarides lumbricoides); the tapeworms, (teniæ); and even sometimes trichuris.

The drug-school has made out of this a particular worm-disease, and recommends, villanously, an army of remedies, by which these worms shall be marched out of the body. But these very means, by disordering and weakening the digestive organs, render the trouble more permanent. In animal bodies, as on trees, the quantity of parasites is directly inverse to the vigour of the stock on which they feed themselves. Besides the debilitation of the alimentary canal, induced by medicines, these so-called vermifuges, are almost all given in quantities of syrup and such wormfood; they cause a great secretion of mucus from the bowels, which forms the worm-nest. The symptoms produced by the existence of worms in the body of children are, blue rings round the eyes, dilation of the pupil of the eye, pale face, frequent change of the colour of the face, itching at the ends of the mucous membranes, where they are connected with the skin, particularly at the nostrils, anus, &e., augmented slime-secretion, bad smell of the breath, frequent nausea, very changeable appetite, augmented thirst, pains in the abdomen, principally in the region of the navel, emaciation of the whole body, restless sleep, gnashing of the teeth in sleep, convulsions and faintings, itching in the neighbourhood of the sexual organs.

The means to remove these evils and their causes, are, simple and moderate diet, drinking water freely,

warming bandages over the whole abdomen, repeated general and local baths, and injections.

Dr. De Meyer pursued the following course in a case of a child with tape-worm, which I myself found successful:

He first reduced the diet of the child to pure fresh milk and sourish fruit, then he put a four-folded, wetted and well wrung-out piece of linen over the whole abdomen, which he covered by a similar dry one. He further had the child, morning and evening, enveloped in a wet linen sheet, not much wrung out, till it sweated; after which he had it put into a halfbath of about 52° F., where it remained till a shaking chill came upon it—the feet and abdomen were all the time well rubbed. After this, from one to six quarts of water were quickly poured over the stomach of the patient, and it was then put in bed with its bandages on, and well covered. In the first two days the child drank once, on the third and fourth days twice, finally four times a day, till it vomited, but this drinking was only prescribed one hour before and one hour after any meal.

In the first few days the patient lost his colic pains; the seventh day there appeared great uneasiness in the bowels, which lasted till the eleventh day. On the thirteenth day, the patient felt, suddenly, after he had taken the third glass in the afternoon, a violent pressure for a stool, when with a great doal of tough slime a tape-worm of the length of twenty-one feet came away.

After this Dr. De Meyer ordered only two halfbaths daily, and the stomach-bandage. On the fourteenth and fifteenth day a great many parts of the worm came off again, and all disorder disappeared. The patient was now allowed to return, by degrees, to a more nourishing meat-diet, whilst he was daily twice washed, and drank moderately of fresh water.

Thus in three weeks the child got healthy and strong, and remained so up to the last accounts which were given, five years after the above described occurrence.

I consider it quite in place, to add here a few general remarks, which ought to be more extensively known:

The older the child grows, the stronger become its digestive organs,—if they are permitted to grow stronger by the parents and physicians,-and the fewer the worms. And it is certain that the worms. by themselves, give very little annoyance. Very few cases have been seen, where the intestines were perforated by worms, and where this has been asserted, it is not ascertained, whether this perforation has taken place before or after death, and whether the perforated parts of the parenchyma were in a sound condition or not. (If, for instance, children are brought up with warm and sloppy fluids, the intestines get brittle like those of pigs under similar circumstances.) A sensible practitioner will, therefore, care much more about the general condition of the intestines than about the existence of worms in them.

If no other reproach could fall on the drug-practice than the rudeness and madness with which poor children with worms are treated, it would be alone enough to make one shudder. One glance at the prescriptions, recommended and praised in such

cases, will suffice to prove this. And all this horrible poisoning is perpetrated for no real, or even imaginable good, because even if some worms are removed by them, the cause of disease remains and is immeasurably increased.

#### V.-CROUP,

Belongs to the family of the so-called Angina, Cynanche or Isthmitis, which is an inflammation in the organs for swallowing and breatling, extending from the back part of the mouth down to the stomach, and from the head of the wind-pipe down to the lungs, by which the operation of the organ is either partly or entirely impeded. The wind-pipe is peculiarly the seat of the inflammation, and its specific character is exudation of plastic lymph within the wind-pipe and bronchial tubes, which in children often rapidly increases to the point of threatening life. The exudation of lymph easily follows inflammatory irritation during infantile life; the wind-pipe of children is comparatively very narrow, and, therefore, easily stopped up by foreign substances. Every one knows that any common inflammation of the wind-pipe produces a narrowed, contracted condition of that organ and an alteration in the voice; both symptoms, of course, must get worse when the plastic lymph begins and continues to exude; for the more this lymph collects on the inner coating of the narrow wind-pipe, and is organized as a false membrane, the smaller is the passage through which the air has to pass in breathing. This exudation of lymph and its concretion on the exterior surface of the wind-pipe, must by and by stop up the passage for air, and this must produce suffocation. We do not find in the mouth the least irritation or swelling, (unless the glands are inflamed at the same time,) nor can we detect on the throat in the region of the wind-pipe any redness or swelling, though the patient feel a dull pain, if we touch the head of the wind-pipe in the second stage of the disease.

The symptoms of *Croup*, or *Angina membranacea*, or *inflammation of the larynx* and *trachea*, are known nearly to every body. Dr. Sachse gives the following masterly description of this disease, undoubtedly the best I have seen or heard of:

"The croup breaks out either suddenly, with a peculiarly sounding convulsive cough, or, what is more frequently the case, it is preceded by catarrh and febrile attacks, which, after a few days, merge into the above-mentioned cough, accompanied with hoarseness and whistling breathing. But as children soon again show an inclination to play and to eat, and as the whistling sound of the breathing disappears, or at least is only observed when the children cough, cry, speak or laugh, it is very often overlooked, as well as the particular barking sound of the mostly dry cough, till it returns in the afternoon or hours of rest, accompanied with light pains and compressions of the windpipe. This takes place with so much apparent difficulty, that the children start up out of their sleep or leave their plays. Their face gets red, the bloodvessels of the head and neck swell up, and the pulsations are hard and quick. But after from fifteen to

forty-five minutes the children sleep or play again, and they might be thought well, if the pulsation was not so quick, the wind-pipe not so painful to the touch, the cough not so rough, and the breathing not somewhat difficult. The remissions and real intermissions, may well deceive. But soon the attacks of ehoking and suffocation return more frequently and more vehemently. The longer the sleep lasts, the louder and quicker the respiration becomes, till a new attack comes on. The cough is now more barking; brings up, in the beginning, only watery frothy matter, sometimes coloured with bloody stripes, in which cases the patient complains of violent pain in the wind-pipe, or even pipe-like pieces of membranes are, with or without some relief, thrown up. The inspiration gets now more and more whistling, difficult and louder; the head is thrown backward, the wind-pipe protrudes, is painful, and the child calls it the sick place. There are often convulsions of the face and elsewhere. The fever increases, the eyes, face and hands burn, and, although the tongue is moist, the thirst is nearly unquenchable. Drink is so quickly taken, that it flows often again out of the nose. The pulsation is so quick that we cannot count it; it loses by and by its hardness and gets very weak, even intermitting. The anxiety is now indescribable; no position suits the patient; he jumps from the bed, he stretches out his throat and tongue, tears his dropping hair, his clothes and those of his nurse, whom he embraces, imploring for air; he fixes his hands and feet, in order to gain a deep breath. Thus, we see the sufferer pale, blue, blown up and exhausted, sink on his couch, and fall apparently asleep; but he rolls his half-open eyes upwards so much, that we can see the albuginea or white coat mostly reddened. We begin to hope somewhat, but all at once the poor victim starts up, we feel the trembling of the heart, the quivering of the carotid arteries on the swollen neck; we see how the diaphragm works convulsively; how the cartilages of the ribs and the sternum are vehemently drawn back; how the shoulders are so raised up with every breath, as to make deep hollows above the collar-bone; how the muscles are drawn in, the head of the wind-pipe up to the chin; how the nostrils expand; how the eyes sink in, grow dim and surrounded by blue rings. We hear now only a hoarse, croaking, pressed moaning for air and drink," under the most vehement rapidity of breathing; far from the sufferer, we perceive now a kind of breathing, like continued sawing, which becomes loud, not only in the inspiration, but also in the expiration. This sound changes to a rattling noise; the coughing is now silenced; every thing given to the patient as a remedy is taken and swallowed with voracious rapidity; he has his full senses, and even then, when his voice is already entirely gone, he implores help by signs. He lacerates himself with his nails and teeth, tears deep on his tongue, and throws himself, screaming for air against the wall, till he sinks down a corpse; or, he shudders and trembles and dies in convulsions; or he at once gets quiet, as if the disease had left, and dies blue, swollen, covered with cold perspiration."

This horrible picture is to the letter true, and yet it is imperfect, if the helpless victim got into the hands of a drug-practitioner, who augments his suffering to frenzy by his blisters, mustard, horse-radish, leeches, fontanels, calomel, vomitives, jalap, hyoscyamus, seneca, digitalis and preparations of ammonium, copper, zinc, iodine, &c.; or more terribly still, by cutting the trachea, like butchers a hog, instead of certainly curing him, without any medicine or knife, by the skilful and simple application of cold water. And even if the drug-practitioner does not always kill his patient, there generally will remain a fatal after-disease.

The causes of this frightful disease in children predisposed to it, are simply atmospheric influences, (in spring and fall, dry and raw winds with a clear sky;\* the age from the second to the thirteenth year the male sex, full, strong, robust constitution.)

It seems at least interesting to know something of the expectorated substances, as there are many errors abroad. In the first and second period the cough remains nearly entirely dry; it is, when in these periods a catarrhal phlegm is produced, and the cough becomes loose, that the exudation of plastic lymph is prevented, and the disease is cut short. But when the exudation has already taken place, the system makes an effort to throw it off. Shreds of such new-formed membranes are coughed up, sometimes the whole of it is loosened. It looks white, it is some-

<sup>\*</sup> Dr. Joerg, Professor in Leipzic, considers a wet, cold and sharp atmosphere, such as the east winds bring to our shores, the most apt to produce croup, by irritating the wind-pipe and suppressing the exhalation of the skin; he thinks running in such air particularly dangerous.

times mixed with red vessels, and enveloped in slime. If the whole of the new-formed membrane is loosened, it often retains entirely the form of the wind-pipe, and can only be driven out with great difficulty. Sometimes we find on these membranaceous formations small ramifications, as they run from the general stem of the wind-pipe into the lungs. Such far-extended exudations are rarer; but when they exist, blood is generally mixed with the expectoration of the membranes. These membranes are of various thickness, from one to three lines, and not of equal dimensions throughout. They have generally the form of the wind-pipe, but sometimes that of a valve or that of a polypus. They are continually new-formed; and even after the expectoration of one such formation, immediately another one is formed, if the cause is not removed. And this is the reason of the want of success of medicinal treatment in this disease.

Croup is not contagious, and appears epidemic, endemic, and sporadic.

I intend now to give the treatment of the croup which has been ALWAYS successful in the first and second stages, and has very often saved in the third stage; and as we do not always get the patient from the beginning of the disease, we will divide into three parts, according to the three stages of croup.

First Stage.—Let the patient be washed with cold water all over the body for one minute, and, without being dried, put into a wet linen sheet, not much wrung out, and very carefully covered. On the head and neck we put cold compresses, to be renewed every quarter of an hour; he may drink as

often as he chooses small quantities of fresh water. Generally he sleeps in this loose packing, till the sheet gets entirely dry, when the skin again begins to get hot and the breathing rather difficult and hoarse. The patient must then be packed in another still wetter linen sheet, the bandages on his head and neck renewed as before, and sleep will take place. In this he remains till either sweat is produced, or the skin gets again hot and dry. In the first case, we let him sweat as long as possible, and wash him off with water of about 60° F.; in the other case, we envelop him again in a wet sheet, where he certainly will sweat. After the washing of this sweat, we put the child, with its skin wet, in a dry linen sheet, and continue the bandages on the head and neck. About this time the child will generally vomit slimy matter.

As soon as we find the patient getting somewhat hot, we must put him immediately in a wet sheet, and act exactly as we had done before. If he has sweated a second time, we had better only wash him off, should he again get restless, and continue the bandages on the neck and head. On the third and following days, we wash the child only twice a day with water of 60° F. It will be entirely well the fourth or fifth day, and may be allowed to run about.

Second Stage, or that of Exudation.—It is the highest degree of inflammation, and our efforts must be to combat and subdue it. The body of the patient is very hot and dry; the forehead generally covered with sweat; the face swollen; cheeks, lips, tongue, jaws and throat highly red; the look

piercing; the eye luminated with a peculiar splendour; the breath very hot; the arteries and heart beat visibly; respiration very difficult, with a whistling, fine, hollow sound, which is principally heard in the act of inhalation; sleep is very much disturbed; the coughing spells are dreadful, dry, hollow, barking and sharp-sounding.

We wash the patient immediately with cold water of about 40° to 45° F., put him after that in double wet sheets, and cover him well; we place on the neck, throat, head and upper part of the chest cooling bandages, incessantly renewed, and urge as much as possible the drinking of ice cold water, though the swallowing is so painful, that it seems beyond the power of the patient. After a short time, the swallowing in small quantities will be easier.

These washings off and envelopings must be repeated as often as the heat returns, which may in the space of every two or three hours. It is not, till the heat is very much diminished, the child quieter, and the breathing freer, that we may allow it to remain in the sheets till it sweats. This sweat should last half an hour, after which time the patient is put into a bath of about 60° to 64° F., and quickly washed off. We then put him, wet from the bath, into a dry sheet, cover him well, but not very thickly, continue the repetition of the cooling bandages, as above, very frequently, and he will soon sleep.

There may be some more or less exacerbations, particularly in the evening, which we treat in the same manner as above; only that we now, in the second enveloping, generally await the sweat, which

is, after about an hour's duration, again washed off. The patient now gets quiet, coughs little, and vomits, without great exertion, a tough white phlegm. Now we wash the child well off four times during the day, with water of about 55° F., then put it wet into bed, cover it well, and renew bandages on neck and head which are wetted in very cold water, as often as they get warm. The next day we wash the child once more with water of about 60° F., and repeat this washing only, when it sweats of itself, the water then being about 65° F.; we still retain the bandages on the neck, which are now only less frequently renewed.

This washing with water of 60° to 65° F., we continue for some days longer, and put the bandages on, in order to keep up the activity of the skin and prevent local irritation.

Third Stage, or that of Threatening Suffocation.—We find the patient, after the two preceding stages with swollen face, wild rolling and staring and glassy eyes, gnashing teeth, convulsively closed fists, blue lips, hard pulsation, &c. He rises, bends backwards, and gasps with open mouth for breath; the breathing is whistling, sharp and hissing; the cough seldom, short, and always accompanied with a struggle to suppress it; the body is generally covered with cold sweats, &c.

We have first of all to dry off this cold, clammy sweat with dry clothes, rubbing the skin slightly at the same time; to cool the skin by a quick washing with cold water; and then to put the child into a bathing tub, where it is kept by two nurses. Here cold water is poured over it, from eight to ten minutes, from above downwards, particularly on the head and neck; at the same-time, the nurses rub the chest, neck, and extremities of the sufferer with wet hands. Still wet, we put it in dry sheets and to bed, and cover it well.

WE OUGHT NOT TO BE ALARMED IF THE CHILD, WHILE THE WATER IS POURED OVER IT STRUGGLES HARD, GASPS FOR BREATH, AND GETS A BLUE COLOUR IN THE VERY MUCH DISTRACTED FACE.

After the child has been put to bed, we surround its neck and head with cold compresses, or with a bladder filled with pounded ice over a wet sixfolded piece of linen, and try to make it drink cold water. It soon falls asleep, and rests somewhat. As soon as the breathing again becomes difficult, and the skin hot, (from one to three hours probably), we again pour water over the patient, as above described, but not so long at a time, from two to five minutes will suffice, according to the strength of the child, and the shorter time it was in health, the more vigorous treatment it will bear, and vice versa. This process must be repeated, with the recurrence of the symptoms to eight or ten times, yet we may, after the first four or five times, shorten the duration of it more and more. The sweat, after the above packings, is washed off with water of about 65° F.

When the child begins to ask for victuals, we may give it some milk and gruel, and when afterwards some heat returns, we apply immediately a washing with water of about 55° F., and give plenty to drink.

The bandages we, of course, continue for some time, till all is perfectly right.

A similar, but somewhat more violent, perhaps a little shorter treatment is given in:

"Medical Annals of the Austrian empire, (Medicinishe Jahrbuecher des K. K. Oestreichi schen Staates.) 1 Stuck, page 71—82; it recommends particularly the treatment of the 'Angina membranacea, by pouring repeatedly cold water over the patient.'"

So much is certain and generally acknowledged by all hydriatric authorities, that we cannot do well in extreme cases of croup, without this apparently very violent application of the cold water, which particularly frightens our nervous and blindly biased mothers.

Priessnitz gave, as he always does, in a few words, the following prescription:

"In the beginning of the croup, put the patient in wet sheets, change them every ten minutes, and surround the neck with cooling bandages. If the skin is, after some hours, still hot, take the patient out, wash him off in tepid water, (viz., 65° to 68° F.,) dry him well, and place him into a tepid sitz bath, in which he remains up to one hour, if the heat does not previously diminish. During this sitz bath, continue the cooling compresses on the neck, and rub the whole body all the time. When the patient has got better, put him again in wet sheets, and continue them till the disease is entirely conquered. Let the patient drink frequently, not quite cold water, and only allow him to sleep, when the face is not red."

An opponent to the water-cure as an independent system, Dr. Beyer in Soest, in "Wochenschrift fuer die gesammte Heil-Kunde," (Weekly Gazette for the whole medical science,) gives the following case:

"I was called to a child of one year and nine months, suffering from croup, on the third day from the beginning of the disease. I prescribed leeches, vomitives, cups, sulphur, &c., without any success. Finally, when the rattling in the throat, and the death-like coldness of the body, and the want of pulsation indicated the imminent danger of dissolution, I resolved to try the so often praised effect of pouring cold water over the back part, of the head, neck and spine, which I did out of a vessel containing about one quart of water, and repeated this twelve times. After this, I put the child in blankets, and gave him warm tea to drink. The effect was, that warmth soon returned, the breathing got freer, and the rattling ceased, so that the child could be considered out of danger."

A very striking case of the curative powers of the hydriatric system rightly applied, is narrated by Dr. Lauda, in Medical Annals for the Austrian Empire, &c., 2 Stuck, page 235.

A boy of seven years of age, weak, fair and delicate, had suffered from measles, varioloids, inflammation of the intestines, scrofulous attacks, &c., and had now got, in consequence of a metastasis after scarlet fever, croup, complicat d with inflammatory dropsy in the belly. The whole mouth seemed to be dried up, the tongue was covered with a brown crust, the skin hot, dry, withered and flaccid, the breathing

very difficult, short, quick, whistling. The extremities were very thin and lean. He was unconscious, and had pains by pressure on the abdomen. When Dr. Lauda, at first, poured water over him, the whole body became blue, and continued of that colour, till a quarter of an hour after he had ceased. But the process was soon followed by alleviating symptoms, in large evacuations, of terrible excrements and thick urine. Four hours after the first pouring over he grew worse; again water was poured over him for ten minutes, as before. After eight hours the third pouring over, with great alleviation. From this time daily, only two pourings over. All this time the patient urinated much. After the eleventh pouring over, the dropsy was entirely gone, notwithstanding the abundant drinking. After the twelfth pouring over, a tetter-like eruption covered the whole abdomen, which in consequence of washing the whole body twice daily for eight days, healed in the form of branlike scales.

The boy then quickly recovered, and remained well for three years afterwards, when he was attacked with a nervous fever, of which Dr. Lauda again cured him by pouring water over him.

Although it is contrary to my intention to use this book for a means of advertising my own successful practice during these last fourteen years, I cannot omit, for the sake of humanity and my holy cause, to mention the case of a lovely boy of six years of age, the son of Mr. Lovell, in Third Street below Vine, Philadelphia, who at the time of the cure expressly permitted to use his name, but whom I have not seen

since. The child was in the third stage of the croup and apparently dying. Dr. Remington, the family physician, had, as a last resort, proposed tracheatomy, i. e., the butchering of the wind-pipe, a proceeding to which sometimes an insane suicide takes refuge, and refused consultation with me. He was then dismissed and I called. When I entered the room, the poor victim of the science, par excellence, made a noise like that of sawing, in inspiration and expiration, the cough had nearly ceased, he only made every now and then a croaking noise, which he tried to suppress. I undressed him immediately, threw away the stifling onions on his feet, wiped off the cold sweat, put him in a dry bathing tub, and poured six buckets of cold water (about thirty pitchers) over his head, back and spine, while he was held and rubbed by some assistants, and his manly grandfather. Without being dried off, he was put into a dry linen sheet and blankets, when in about three quarters of an hour he broke out into a slight perspiration; this was washed off in water of 65° F. Bandages on the throat and neck were renewed every minute, and on the head every two minutes. As soon as the head was somewhat freer, a warming bandage, (viz., a piece of linen wetted in cold water and well wrung out, and carefully covered by dry linen, and renewed when beginning to get dry,) was put over chest and abdomen, and ice-pills taken, and afterwards water drank, &c. The boy got well.

I cannot omit to speak of a very dangerous remedy, which most of the physicians of this country apply in

the first and second stage of this disease, and which is condemned even by the most eminent drug-practitioners, as well as by common sense; I mean EMETICS, and all the mixtures compounded with them. A great many doctors begin the treatment of croup with vomiting, or add to other means from time to time an emetic, regardless of the stage of the disease. This is all wrong, even looked at with drug-eyes; for every vomiting causes a congestion of the blood to the organs of the chest; the ipecacuanha acts so, even if it does not produce vomiting. The wind-pipe stands in immediate connection with the lungs, the croup inflammation itself extends often to the lungs; how then can a man of the smallest sense prescribe an emetic? when every vomiting, be it produced by artificial means, or by the spontaneous exertion of the body, must of necessity, in the first stage of the croup, be injurious in the highest degree, by either augmenting the irritation, or heightening the already existing inflammation?

## VI.—BLOOD-BILES (Furunculus.)

An elevated, circumscribed, dark red, hard, very painful inflammatory swelling in the skin of the size of a pea, walnut, or even larger, with a tendency to suppurate or indurate.

In the beginning the pain is not great, but soon gets very vehement. If the sufferer is delicate and very young, it may be accompanied with fever. By and by the boil gets pointed, becomes on the end soft,

whitish, breaks, and matter mixed with blood flows out. When the core of the suppuration is thrown out, the furunculus soon heals.

This boil in children is generally caused by the unhealthy condition of the milk of the mother or wetnurse; or by sickness of the mother during the time of her pregnancy; or by an unhealthy swelling; or by the use of mineral medicines. The disease is generally seated in the stomach, and originates from bad assimilation, scrofula, arthritis, syphilis, scurvy or mercurial disease of the child or its parents.

In regard to the proximate cause of this diseased condition, the learned professors of the drug-school entertain very contradictory views. Those of Dupuytren, the clearest and the most reasonable, are given in the following words:

"La peau présente à sa face profonde une multitude de cloisons fibreuses, qui se détachent du derme, et s'unissent au tissu cellulaire souscutané. Ces cloisons circonscrivent des loges plus ou moins larges, qui renferment un paquet de tissu adipeux et des rameaux nerveux et vasculaires, qui vont s'epanouir à la surface libre des tégumens. C'est dans inflammation isolée d'un ou d'un très-petit nombre de ces paquets celluleux que consiste le furoncle. L'anthrax ne diffère du furoncle que par son étendue et la multiplicité des paquets celluleux qui sont enflammés à la fois. La phlogose débutant par le tissu adipeux, elle tend à lui communiquer plus de volume, à l'étendre en même tems que la cloison fibreuse qui le contient réagit sur lui et le comprime. Il résulte de là des accidens inflammatoires très violens et une gangrène de l'un et de l'autre organe."\*

Nature tries to throw off some matter which has been accumulated in the mass of the juices, and brought to the surface, in the same manner as a splinter, which, as a foreign matter, has penetrated into the body unable to be assimilated, is driven out by suppuration, if not otherwise removed; it is, as every acute struggle, a tendency to protect the body from foreign intrusion, and to restore its healthy equilibrium by throwing out what wrongly had intruded, or what could not become matter of the healthy body. But it is necessary to assist this, "vis nature medicatrix," or the furuncles, may end in malignant suppuration and gangrene.

The first thing the physician has to do is to remove the causes, viz., to wean the child, to give better rooms, throw all medicines not to the dogs, but out of the window, &c. To cover the already suppurating furuncles with wet compresses, and envelop the

<sup>\*</sup> The skin presents on its under surface a great number of fibrous cells, which detach themselves from the dermis, and unite themselves to the subcutaneous cellular tissue. These partitions circumscribe spaces of different sizes, which enclose a packet of fatty tissue, and the extreme branches of nerves and blood-vessels proceeding to expand on the surface of the integuments. The furuncule or boil consists in an isolated inflammation of one, or a very small number of these packets. The carbuncle differs from the boil only by its extent, and the greater number of the cellular packets inflamed at once. The inflammation commencing in the adipous or fatty tissue, swells and extends it at the same time that the fibrous partition which contains it, reacts by compressing it. Thence a violent character of inflammation tending to the slough or gangrene of the whole tissue involved.

child every four hours in a soft wet sheet, out of which it is taken and washed in water of about 68° F.

This treatment is continued till the disease is entirely removed from the body, which is about the tenth day, in very hard and serious cases. After this we cease to pack, and cover those furuncles which have broken, with fourfolded and well wrungout pieces of linen, and these again with dry linen; these wet compresses, with their dry coverings, must be renewed as often as they begin to get dry. Besides this, the child is put into a bath twice every day for five minutes, the temperature of this bath at first may be about 65° F., but it ought to be gradually colder, from day to day. (If there should appear in consequence of some neglect on these furuncles, what is called proud flesh, we have only to syringe the boil with cold water a few times during a day or two, which will perfectly suffice to make all right again.) This whole procedure is to continue four weeks.

### VII.-RUPTURES.

Children may have umbilical ruptures (omphalocele), bubonocele, ruptures of the scrotum (hernia scroti), and of the thigh (merocele or hernia cruralis), which are either innate, (hernia congenita), or produced by vehement screaming or other violent causes (hernia acquisita.) The most frequent are the umbilical ruptures, which are caused solely by the awkward and clumsy application of the umbilical band.

We have before all things to remove the causes of the screaming, provide a proper diet for the mother, and put a good band on the spot, with a very well wrung out compress under it; we at the same time use daily washings of the whole body, and, according to the age of the child, sitz and half baths.

These applications have been always sufficient in my practice, and the time of restoration ranged between six weeks and one year. Dr. De Meyer narrates the following case of a bubonocele:

"Ferdinand Heinz, son of a government officer, nine years old, strong and healthy, got in consequence of a fall, which he met with in jumping over a ditch, a bubonocele on his right side. I was called, after different liniments had been used, and a very disagreeable band applied, for more than half a year. I had the patient every morning washed with cold water, and water poured over the lower part of the spine and the groin; I prescribed four sitz baths, each for fifteen minutes daily, and put, after the reposition of the rupture-part, over it a sixfolded compress, wetted and well wrung out. This compress was kept by a pelotte of the size of a walnut firmly to the spot of the afflicted groin, and fastened round the body by means of a single waist-belt, and a thighstrap. The cold compress had to be changed as often as it got warm. The patient was directed to remain as much as possible in the open air, to take moderate exercise, and to receive only very easily digestible food.

"In consequence of this treatment the hernia retreated; the enlarged ring of the groin grew so perfectly together, after about ten weeks, that all coughing, sneezing and blowing could not force out the hernia again. Notwithstanding this, I had the daily cold washings, and the wearing of the pelotte continued for eight weeks longer."

### VIII.—ERYSIPELAS.

In former times, different cutaneous inflammations, which appeared superficially on the skin, and penetrated but little into the interior, and which though not sharply circumscribed, were limited to certain parts of the skin, were called erysipelas. Now we understand under that name, that kind of inflammation of the skin, which is seated in the net of the lymphatic vessels on the surface of the skin, probably also in the glands, separating the phlegm, and in the malpighian net. It appears only on certain parts, extends far more frequently on the surface than in the adipous membranes, and is connected with a disease of the digestive organs, particularly of the liver.

This is the TRUE ERYSIPELAS, every other cutaneous inflammation of a similar kind is Pseudo-erysipelas, viz., superficial skin-inflammation, in consequence of heat, cold, chemical acids, light wounds, metastatic deposition upon the membranes and glands, gastric, rheumatic or arthritic difficulties.

The symptoms of the *true* or *real erysipelas* are: the patient suffers for two or three days of catarrhal gastric fever, (febris erysipelacea), then a redness with itching, burning heat, appears on some parts of the body; it is rose-colour, extends from one point, is

paler than in other inflammations, the skin round its edges is of a yellowish colour, disappears under the pressure of a finger, and returns immediately, when the pressure ceases; at the same time there is a flat, moderately hard swelling; the pain is not pulsating and pungent, but burning, itching and stretching. It extends either only over a small surface, over a whole member, or even over the whole body. Sometimes it is of a very fugitive character, disappears often quickly, and reappears on another spot, always with a new fever attack. It may make a metastasis to the mucous membranes, or to the pia mater, serous coat of the brain, and produce encephalitis—inflammation of the brain.

The usual course of erysipelas is short, ends either naturally in critical discharges from the skin and kidneys, or in an eruptive disease; or, if treated badly in suppuration, or worse yet, in mortification, or in induration, or in chronic erysipelas.

Persons of an excitable, sensitive, plethoric, debilitated skin and body with venous dyscrasy, hemorrhoidal congestions, very fat persons, especially if pale and flaccid, such as suffer from gout, from irregular menstruation, &c., are liable to contract this disease. Taking cold after heat; quick change in temperature; the same condition of the air which produces in the latter part of the summer and fall, epidemic dysentery, gastric disorders; the use of fat, tough, rancid and exciting victuals, of oysters, crabs, sturgeon, goose-flesh, &c.; vehement anger, use of spirits, &c., are the proximate causes of the disease. In general, we may say, that an erysipelas can never exist with-

out an augmented secretion of gall, and without a corruption of the assimilation.

The treatment in general is very simple. We first conquer the fever by the application and renewal of the wet sheet packing, till the dry heat of the skin is subdued and sweat appears, which is only washed off when it begins to subside; at the same time, water is to be drunk in small quantities and often.

If the erysipelas takes hold of the neck, we place round it, besides the general envelopings, small well wrung out compresses, and take care that the mouth and upper part of the throat is often washed out with very cold water; if disorders in the bowels are connected with it, we apply warming bandages to the abdomen, and recommend injections, which have to be tepid in the first days, and cold only when the inflammation has subsided. If the costiveness is obstinate, we give a sitz bath of 72° F., with much rubbing of the whole abdomen, from twenty to forty-five minutes, according to the age of the patient.

Erysipelas on the sexual parts, we treat in the same manner; we pack the patient in wet sheets and try to produce sweat, applying to the affected parts well wrung out bandages, which we should not renew so often, that we should hinder the sweating of the body. In these cases, sitz-bath or any local bath is inadmissible, and difficulties in the bowels have to be removed by injections, warming bandages, freely drinking of water, and rubbing of the abdomen with wet hands.

The erysipelas of new born infants, which is generally preceded by jaundice, or rash-like eruptions, is

an object to which I would particularly direct attention, as the treatment is rather more difficult.

The enveloping in these cases must close carefully on every part of the body, the sheets be very fine and well wrung out, in order to procure quickly warmth and skin secretion. If the fever and inflammatory condition is greatly diminished by means of repeated envelopings in the wet sheets; well wrung out bandages, washing of the whole body in water of 70° F., and, if there is constipation, injections of the same temperature will suffice to restore health. The changing of the bandages is indicated by the degree of the inflammation in the region of the navel. The abnormal heat must be always moderated by these bandages. The difficulty here is, to decide when we have to renew the packing, and when to stop it entirely; it seems to me preferable to leave a good deal of the heat to be subdued by the mere application of the bandages on the abdomen, and mere washing of the body; for if we extract, by the repetition of the envelopings, too much warmth, we may produce metastasis to an interior organ, and thus endanger the life of the infant, if we cannot at once recall the irritation to the skin by rubbing the body briskly with wet hands, sudden and repeated immersions in cold water, or by dashing cold water on the cerebellum and spine.

In every case of erysipelas, the principal object of the hydriatric practitioner is to produce, as speedily as possible, a critical secretion in the skin; and when the heat of the surface is once subdued, the patient must be compelled to remain in pack till he perspires. The patient should be kept in bed, and only washed with tepid water as long as the critical evacuations are not perfected. After that, return to cold washing, and to the usual mode of life.

I rather avoid the use of local baths, they may easily do injury, and rarely any good.

# IX.—JAUNDICE, (icterus flavus.)

Is not in itself a disease, but only a symptom of disorder of the gall system. It originates either out of excessive or impeded preparation or secretion of gall. The latter may be in consequence of inflammation, of organic faults of the liver and gall-bladder, or of mechanical impediments, f. i., obstructions in the ductus or passage of the gall-bladder by a gall-stone. Children are much subjected to this disease. As manifested in infancy, it may be divided into acute and chronic jaundice. But it is also frequently combined with other diseases, viz., with inflammation of the brain, of the liver, bilious fever, &c.

The treatment of the jaundice of new born infants consists simply in a light sweating in a common bed, followed by a bath of five minutes duration, of about 70° F., twice a day, and drinking of some teaspoonsfull of fresh cold water. In a few days, the re-absorption and excretion of the gall is effected without any difficulty, while the deposits in the skin are thrown out by the sweat.

In the treatment of the acute form of jaundice, which in a few hours covers the whole body, as if it were blown over it, and with which there is gene-

rally combined an irritated and feverish condition, we apply packing in wet linen sheets, and sweating in them from one to one hour and a half, twice a day, followed by a bath of 70° or 60° F., (according to the age, strength and sex of the individual,) and hard general rubbing with wet hands, and warming thick bandages over the stomach and liver region, to be renewed when they begin to get dry. The bed cloths ought to be changed often, the room and bed itself well aired.

Chronic Jaundice, which is generally the consequence of induration, or obstruction in the upper intestines and mesenteric glands, and where the abdomen is generally puffed up and constipation ensues, is thus to be treated:

We pack the patient twice a day in dry sheets for sweating, give him after it a plunge-bath of 65° F. for two or three minutes, and put wet compresses, which ought to be carefully renewed before they get dry on the affected parts, the whole region of which must be briskly rubbed with wet hands whenever the compresses are removed for the sake of renewing them. In obstinate cases, we pour four to six pitchers of water over the patient twice a day, before the packing, and require him to drink as much fresh soft water as possible, and to walk much in the open air, if an adult.

The constipation is removed by injections, given half an hour after a meal, the temperature of the water to be about 68° F. If the bowels are very obstinate, the patient has to resort to a half-bath of 68° F., in which he rubs his own abdomen as hard as he

can, while two attendants rub his extremitics and back continually and briskly. The half-bath may be prolonged from twenty minutes to one hour and more, till it produces the desired effect.

If the jaundice is only the consequence of another disease, then the primary disorder is to be treated and removed.

## X.—INDURATION OF THE MESENTERIC GLANDS.

In this diseased condition the infant crics often; is restless; sleepless; vomits the scarcely sucked milk; has swelling and induration of the abdomen, in which there are small lumps to be felt, and is frequently constipated.

We sweat such an infant slightly twice a day, bathe it afterwards in water of 72° F., decreasing the temperature daily one degree, down to the natural temperature of spring-water, which may be considered here about 50° F. In the beginning the bath should be ten minutes, by and by five minutes; finally, when it is quite cold, from two to three minutes. The patient must wear constantly, over the whole abdomen, a thick wet bandage, which is to be very well covered by dry thick clothes, and should never get dry. The mother must live on a very simple and well-regulated diet, and be as often as possible with the child in the open air. Injections of 70° F. have to be used, till sufficient stool is produced; and some water drank.

### XI.—SCARLET-FEVER.

An infectious, and sometimes contagious exanthem or fever, accompanied with inflammation and eruption of the skin, occurring either epidemically or sporadically. The peculiar inflammation extends to the mucous membranes, especially that of the throat and tonsils. The brain is, next to these, the organ most frequently attacked. The blood, in bad cases, becomes thoroughly poisoned; and the tissues present, on dissection, the aspect of an almost semi-fluid dissolution. In common with other exanthematous fevers, it seldom attacks the same individual more than once.

The inflammation of the skin is not confined to small parts only, as in red measles, measles or small-pox, but extends over a large surface, over whole members of the body, chest, belly, back, neck, face, and the whole body. The redness disappears by pressure, but immediately returns again, when the pressure ceases. The warmth of the skin is very much increased, and the inflammation extends to the tonsils and the tissue surrounding these tonsils.

In the beginning we find either little or much fever, and some difficulty in swallowing; after two or three days, while the fever remits, in the morning hours, flat, small red spots appear first on the upper, afterwards on the lower parts of the body. These small spots increase and flow together, and thus form bluereddish spots of the size of a hand, which are strongest on the neck and chest, and give the skin a scarlet

redness; they stay a few days, then grow slowly paler, disappear and scale off. The affection of the throat is sometimes very little, at other times so vehement that it is impossible for the patient to swallow; in some cases there exists no sore throat at all, and the disease is very light, or there are, instead of it, such violent affections of the head and nerves, connected with fever, that it is on that account very dangerous.

1. The initiatory stage lasts from two to five days; bruised feeling in the extremities, restlessness, sleeplessness, some fever, pain in the throat, sickness in the stomach, pressing pain in the head, sometimes dizziness, confusion, &c.; vomiting, constipation, bleeding of the nose; the tongue is very red, pulsation hard and quick, (130 to 140 in a minute.) In this stage of the disease we had better remain passive, taking care only that the patient have simple, easily digestible, not too much concentrated or too thin food, and an equal temperature of the sickchamber of about 65° to 68° F., to protect him from taking cold; the bed be very simple and the covering rather light. The room ought to be often aired, vet we should avoid to expose the patient, even in this stage, for any length of time, to any cold draught.

2. Eruptive Stage.—The fever gets stronger, particularly at night; the heat is great, the thirst intense; the patient complains of a prickling and pungent feeling in the skin; then appears, first on the head and neck, and, after twelve to eighteen hours, on the legs, the eruption already described. The warmer we keep the sufferer, the more the fever increases.

In general, we find that the difficulty of swallowing abates, as the eruption comes out on the surface. Sometimes, however, the contrary occurs, and both symptoms are exacerbated together. The tongue appears now slightly covered with whitish fur. This stage lasts from two to four days. In this stage of the disease we envelop the patient in wet sheets, not only to keep the fever down, but also to facilitate the appearance of the eruption. These sheets are changed as often as the dry heat of the skin requires it; generally, two to three sheets are sufficient to bring the eruption out thoroughly. As soon as this desired event takes place, we discontinue the wet packing, and let nature act freely and undisturbedly. But when the amendment stops, or an unfavourable change takes place, we immediately again resort to the wet envelop, and continue with it till favourable symptoms are re-established.

It is always safe and advisable to use the wet envelops, if the eruption does not appear in time, before the fever has become violent, because we prepare the skin by their application for its development, and we have to continue with them, even for days, till the exanthem is brought to the skin.

It is necessary to remark here, that in such obstinate cases where we are compelled to continue the use of the wet packing for some time, we take great care to observe the warmth of the skin, the want of which would place the patient in great danger. Cases of this kind have unfortunately happened under my own eyes in Philadelphia, and have been naturally used as a reproach against the applicability of cold

water; but in these cases Allopathists or Homocopathists, ignorant of hydriatrics, applied the wet sheet indiscriminately, only because they had heard of its success in proper hands. It is always advisable to let the patient remain in the third wet sheet till it is dry, and not to change it till some scarlet spots have made their appearance. The thirst of the patient must be always satisfied to excess, and the stool kept regular by injections.

3. Stage of Efflorescence.—The spots are now redder, particularly on the fore part of the arms, and flow together, so that large parts of the skin are inflamed, like erysipelas; the eruption is neither so dark, nor so single and elevated as in measles; only in fat and hardy children, small pustules are formed like purpels, (v. miliaris,) containing a milky fluid, which has been used for inoculation of the scarlet-fever. The eruption is often very fugacious, it appears and disappears at intervals. This is a bad symptom, if it is connected with high fever.

If the eruption is sufficiently broken out, let nature effect the critical secretions; we have only to prevent every disturbing influence, by which the patient would or might be endangered. The only thing to be done is a daily washing off with tepid water of about 68° F.

Dr. Joseph Weiss recommends, as soon as the eruption seems to threaten to disappear, to pour water for a half to one minute over the patient, or to immerse him suddenly and quickly three to four times in a bathing-tub, filled with very cold water. The

colder the skin appears,\* the quicker we must make the immersion, and it must be repeated in the shortest intervals, and as quickly as possible, till the skin is somewhat reacting. In about six, eight, or twelve hours, the desired effect is gained, and we may then quietly await nature's own efforts. If the patient is of a very delicate constitution, we may rub the whole surface with hands dipped repeatedly in cold water; these wet frictions have to be continued till the skin appears again active.

By means of these immersions, or pouring over, or rubbings with wet hands, we are able to revivify the sunken nervous activity, and avoid with certainty the fatal results that seemed to be impending. Wet sheets are excellent and preferable to any thing else in cases where the skin is quite dry and hot, and where a high degree of fever is visible. Then the eruption, which at other times appears in a very lingering manner, often comes forward in a few minutes. The effect of these sheets is also very soothing and beneficial to patients, whose skin is covered with the eruption, and dry and burning. This inflammatory condition is generally subdued by two or three sheets.

4. Stage of Desquamation begins generally some days after the disappearance of the eruption. The seventh or eighth day after their appearance, or

<sup>\*</sup> If, with such a condition of the skin, we pack the patient in a cold wet sheet, (as only a short time ago a celebrated Homœopathist in Philadelphia did,) we kill the victim of such folly assuredly. The sort of inactivity of the skin in which the wet sheet-packing is useful, is that of dry heat, without transpiration, as mentioned above.

twenty-four hours after the total disappearance of any inflammatory redness, the skin becomes somewhat wrinkled, and gets exceedingly dry. Parts of the epidermis loosen and fall off in the same manner as the scarlet eruption appeared. The new skin has to be washed with tepid water of 68° F., which temperature is daily decreased, until the patient, almost well, can use perfectly cold water.

With a judicious application of cold water we need never fear an after-disease. If, in consequence of some mistreatment, of derangement in the functions of the delicate new skin, by atmospheric changes, or of want of critical excretions by sweat and urine, swellings should occur, and a tendency to dropsical effusions, it is better to send the patient at once to a water-cure establishment in the country, where such cases will be treated by a sweating and tonic process, in which the wet sheet-packing will be principally employed. These effusions of water appear first in the legs, then in the hands, in the eyelids, and under the skin in general, finally in the exterior cavities.

As long as there are any dropsical accumulations, the patient must sweat every day more than one hour, and the transpiration of the skin during the day must be kept up as much as possible, not simply by clothing, but by a general tonic adaptation of baths and exercise, of which, those of a passive character, such as riding and being carried about, are best suited to the strength of the convalescent. If the scarlet-fever passes into other diseases, if it is urged out of its regular course and dangerous metastases take place, in consequence

of faults in the dietetic or medical treatment, the transition from inflammation of the skin to the interior organs is common, and especially to the brain, whose general sympathies with the whole cutaneous and mucous surfaces, through their nerves of sensation, which centre in it as well as its greater normal impressibility, during the period of infancy and childhood, expose it to take on high inflammation or to congestions, about the fourth or fifth day of the disease, and we have sometimes death with the symptoms of apoplexy.

In the report of Dr. J. Huber on the water-cure establishment of Dr. Fritz, in Muehlau, I find the following interesting case of

Scarlet-fever with Malignant Angina and transfer, or metastasis of the Eruption from the Skin to the membranes of the Brain in a very Scrofulous Patient:

M. S., a German soldier, twenty years old, came into the hospital on the 14th of August, with the symptoms of a violent catarrhal inflammation of the throat, and was, for the first three days, antiphlogistically treated by the Allopathic methods without success. The throat suppurated, and on the evening of the third day, the patient got stupid and muttered incoherently, and could hardly be woke into consciousness. The skin was burning hot and dry, yet no vestige of an eruption visible. On the 18th of August, the patient was brought into that part of the hospital where the Hydriatric method of Priessnitz was applied. Here bandages, well wrung out and covered with dry ones were bound on the neck, the body was

sponged, and cold water poured over it, at first every two hours; after four such applications, immediately after each of which the drvness of the skin and tongue were observed to disappear, the sponging and affusion were repeated oftener as soon as these symptoms re-appeared. This treatment was continued till the evening of the 20th. During this time the stupor had entirely disappeared, and the throat improved; the dryness and heat of the skin decreased. The sponging and pouring were employed less frequently as the dry heat and stupor diminished, but the exciting bandages round the throat assiduously continued. In the night of the 20th to 21st of August, the scarlet exanthem broke out from the head to the feet equally all over the body; then the stupor and the angina disappeared entirely. For two days longer nothing was applied, only the man drank much cold water, and already on the eighth day of the disease, that is, two days after the appearance of the exanthem, the whole skin began to peel off. Towards the end of this process, the scrofula, which was before evident, re-appeared in the form of extensive ulcerations over the surface of the body, with enormous inflammatory swellings of the glands of the head and neck. This dyscrasy, deeply seated in the organism, was at last conquered by drinking, bathing, sweating in dry blankets, wet compresses, &c.

Dr. Weiskopf reports the following case:

A child was cured, when one year old, of encephalitis exudatoria in the third stage, by Hydriatric applications. She was the youngest daughter of Dr. W., and was taken sick in his absence, with inflammation of the brain, which reached the third stage, under the hands of an Allopathic friend of the father.

Two years after this disease, when the scarletfever, of a very malignant character, with a tendency to the brain, was prevailing in Reichenberg, where Dr. W. resided, and where two hundred children under drug-treatment died, this same child was attacked by a violent fever; she had a dry hot skin, drank much, and complained of headache. I, says Dr. W., remained for two days the passive observer, and applied only tepid injections against constipation. But when in the evening of the second day, cerebral symptoms, shunning of the light, and delirium appeared, and I suspected scarlet-fever, from the condition of the skin, I washed the little patient all over the body with a sponge and cold water, till the skin was cooled down, and the fever diminished. Without drying her off, I packed her in a linen sheet and put her to bed. She slept very quietly for some hours, and when she awoke, the whole body was covered with the scarlet exanthem; the cerebral symptoms had disappeared, only a slight headache remained. Besides a strict diet, drinking of cold water, cool room and tepid baths, during the period of desquamation, nothing else was applied, and the exanthem ended favourably. The single cold washing was sufficient to reduce the too vehement fever, and to induce the eruption by removing the over-excitement of the skin. Since that time I have often promoted the eruption in this manner when in consequence of the too great inflammation of the skin, the eruption has been retarded. But when there was a

want of action of the skin, I promoted the eruption by short washing, or by sweating by the wet sheetpacking process, and left the rest to nature.

During a very malignant measle epidemic, in 1840, every child treated in this manner went through the attack easily, although a great many others, treated by medicine-doctors, Allopathists or Homœopathists, either died, or got secondary diseases, particularly anasarcas or general dropsy.

## XII.—SMALL POX.

Variolae verae were first observed in the sixth century, and through the crusades in the twelfth century transplanted from the East to Europe. It was then the terror of parents, killing yearly in Europe about 450,000 human beings, till Lady Montague, when in Constantinople, got acquainted with inoculation, and brought it in 1722 to England, (for which she was persecuted by the physicians and clergy to any extent.) and Edward Jenner in the year 1796, made experiments with his discovery of vaccination, (for which he got the idea from a common dairy-maid), and made known its results in a work, entitled "An inquiry into the causes and effects of the variolae vaccinae," London, 1798, for which he was persecuted with the utmost malignity by the medical profession and clergy, who descanted from the pulpits about the impiety of such an innovation which, as they piously said, interfered with the designs of God, who was to be deprived of a means of punishment. Notwithstanding these obstacles and persecutions, he

prevailed, and the English people showed their gratitude.

Vaccination was, undoubtedly, an excellent expedient against the awful and merciless ravages of this disease, but it is now, after Priessnitz's discovery of the use of cold water in curing diseases, not only unnecessary, but even a great wrong, because it is insufficient as a preventive means, and a cause of many diseases which would have been avoided, if vaccination had not taken place, as the hidden disease of one individual is often transferred by vaccination to the vaccinated one. The truth of this assertion is proved by daily experience; thus I have seen a perfectly healthy young girl, born of healthy parents, soon after vaccination infected with a skin disease, on which the parents of the child, which seemed very healthy, and from whom the vaccine matter was taken, secretly suffered as afterwards was ascertained. I even believe that scrofula has been principally so extensively spread by vaccination in carrying it from one child to another.

Besides this, it cannot be denied that vaccination has lost much of that preventive power which it was formerly proved to have, for in our decade, more small pox cases appear than in the former decades of our century, be it in consequence of the length of the time, or of insufficient caution, and of inaccurate adhesion to the prescribed rules of time and execution.

The old dread of this disease has never yet been lost, and therefore the knowledge of the hydriatric treatment of it should be proclaimed throughout the world, as under it this disease loses all its horrors.

and becomes a mere plaything for the judicious and honest practitioner; it becomes even a blessing to scrofulous persons, whose previous diseases are often absorbed by it and carried off, leaving them sounder and more vigorous than it found them.

The symptoms of the *small pox* are so generally known, that I do not think it necessary to go into details; we have four stages:

First stage of infection, connected with a nervous depression; drawing in of the extremities; headaches; restlessness; feverishness; dark urine; bad breath, smelling like mouldy bread; sickness; vomiting; even convulsions, (which are by no means fatal symptoms.) This first stage may last from four to seven days.

· Second stage of eruption. After the first stage is over, we find the skin, particularly in the face, puffed up, continued fever with prevailing heat, and great pains in the head. There now appear small red spots on the face, neck, head and body; this eruption last generally two days; the preceding delirium ceases; these spots elevate themselves, have a hard small knot in the middle, and have formed in twenty-four hours small pustules; the face, saliva-glands, nose, ears, are generally swollen.

Third stage of suppuration begins on the seventh day after the beginning of the fever, the pustules get broad, and are filled with a clear fluid, which gets thicker, pus-like, the urine shows a thick sediment, and fever ensues, with exacerbation towards evening—this lasts three days, and the

Fourth stage of desquamation or exsiccation ap-

pears. On the tenth day of the disease, the pustules begin to burst, and to dry off in the same order as

they came on, &c.

The disease originates only through contagion. The poison is of fixed nature, retaining its power for months, if it is not exposed to the oxygen of the atmosphere. Children from the second to the tenth year of age are peculiarly susceptible. Accidental infection takes place through the lungs, by coming near such as have already the mouldy smelling breath. The seat of the disease seems to be the net of the capillary vessels, between the Corium and Rete Malpighii.

The rational plan of the cure must have in view to remove from the organism the foreign matter, and the inimical irritation which either the infection, or the influence of the climate, or other air-changes have produced, in the mildest way, by bringing the exanthem to the surface, and to let this exanthem pass through the stages which are necessary for the restoration of the body to health, without injury to

the whole system and the several organs.

Small pox, in its regular course, requires no treatment at all. We give a little vegetable nourishment, and keep the air of the sick room at a pleasant and equable temperature, purified by ventilation, and rather cool, about 65° F.

I cannot here descend to special therapeutical indications, for what organ from the brain to the bladder could be considered entirely secure from inflammation, when the body is infected by the small-pox poison? If the fever increases, we envelop the

patient in a wet sheet, and renew it according to its vehemence, but take good care not to extract too much warmth from the body, which would disturb the development of the exanthem. The eruption causes the skin to become inflamed, which, of course, produces again an inflammatory fever, or adds an inflammatory character to the fever existing. This inflammation is necessary to promote suppuration; too little inflammation is as injurious, as too much. We therefore have in the second stage only to moderate the inflammation when too violent, and to stimulate, when too slight. Even during the time of the suppuration, this inflammatory condition has to be kept up. If, therefore, in the course of suppuration in consequence of the fever, the strength will give out, we have to prevent the collapse of the organism, and the want of strength for healing the suppurating pustules, by a more invigorating diet and strengthening water applications. In this latter case, I would recommend some more concentrated food in the shape of venison, or mutton, or wild fowls. fourth stage, when the process in the skin is finished with the formation of the epidermis, and the fever, which at the end of the suppuration has lost more and more, its inflammatory character ceases, the hody asks, without any doubt, for a good strengthening diet, and an invigorating treatment by ablutions, which are given colder every day. In case the eruption will not come forward, the same treatment which Dr. J. Weiss recommends under similar circumstances in scarlet fever, as described above, is to be resorted to.

If a very weakening diarrhaa should ensue, we give every two to three hours injections, and put a compress on the abdomen, wetted in water of about 68° F. Such a diarrhaa is frequently connected with hectic fever and colliquative sweats, the first of which we subdue by envelopings in wet sheets twice a day, in which the patient does not await the sweat; and the second we conquer by the use of cold washings, which we apply to the skin, when the patient comes out of the pack.

The swellings of different parts we treat by applying wet and well wrung out compresses, which remain till they begin to get dry, and are then renewed. Similar compresses are put to the face, if any one of the pustules should suppurate badly. In general, it is well to cover the face when the pustules have made their appearance there, with a piece of soft linen wetted with fresh milk.

It is advisable to put, as soon as we are convinced of the infection, warming bandages to the back of the head, neck, and between the shoulders, which wonderfully prevents a severe breaking out of the small pox in the face.

Every kind of similar exanthems we treat in the same manner, and give the same light vegetable diet.

Thus we never will have any difficulty in the cure of this disease, which is the terror of the people, whilst it can be made by hydriatrics an efficient and innocent means of removing a great deal of disordered matter from the body.

The patient remains during the disease, till the suppuration is finished, in a comfortable bed, in a large well-aired, moderately warm room, not too light; he drinks nothing but water or fresh milk, or some cold, thin decoction of gruel; he eats little, and only such things as nourish little, and do not excite, viz., roast apples, boiled in water with a little fine wheat-bread; if the season permits it, he may eat young vegetables, beans, peas or spinnage. Those fruits and green vegetables which produce acidity and diarrhœas, and every thing difficult of digestion must be avoided, because they would disturb the equilibrium between the intestines and the cutaneous system. Constipation is in every stage of the small pox dangerous, and must be at once attended to by injections. We ought to contrive to give the patient pleasant diversion, and let him sleep as much as possible.

Nothing is more injurious to small pox patients than to give them sour drinks and victuals, they injure the digestive and assimilative functions. I remark here, that we stop any bleeding from the nose, mouth or bladder, by quietness and local application of cold water, but must always take into consideration the disease, with the course of which we must never interfere.

Dr. De Meyer gives a very striking case of a cure, which, on account of the interesting circumstances connected with it, I translate:

He was called to a boy, nine years old, and found him in the following condition: the boy rattled in his throat, and the whole body was so covered with pustules, that not one of the features could be recognised. His head and hands were greatly swollen, and covered with a marble-like crust, the eyes closed by a puscrust, speech and hearing lost, the wings of the nose in constant motion, the teeth brown, the lips dry and broken, breathing very much oppressed, the abdomen puffed up and painful, no stool, urine brownish, the colliquative sweats and the whole atmosphere of the patient foetid smelling; he constantly muttered through his teeth, played with his fingers, &c.

Dr. De Meyer, in order to conquer the nervous prostration and colliquative sweats, ordered packings in wet sheets, in which the patient had to remain till they began to get dry; after this he was put into a bath of 65° F., and cooling bandages applied to the head; this was repeated four times a day. Over the eyes and the whole face, he put pieces of fine linen, dipped in sweet cream, which were frequently renewed; at the same time, he had the body repeatedly, during the day, besmeared with sweet cream. He gave often small quantities of water and milk, and every half hour a small ice pill. On the second day, the vehemence of the disease was allayed, a passage produced, and the nervous prostration and colliquative sweats disappeared. He, therefore, discontinued the packings and ice pills.

The baths and frequent drinking were continued, the eyes often cleaned with milk and water, and the crusts besmeared with sweet cream. Thus the boy was entirely restored to perfect health in twelve days, the small pits and discoloured spots disappeared entirely in a very short time.\*

This so-called milk cure of the small pox is an imitation of the hydriatric method, with the idea that this cruptive disease is most successfully treated, by abundant application of milk, because the same

That the most malignant cases of small pox are very easily managed, if the manager has only courage enough to remain cool, is proved by my own case. My wife, although visited and urged by a great many drug practitioners to use medicine for my treatment, rejected every such offer, and cured me without any difficulty whatever, although mine was a very bad affair.

### XIII.-MEASLES.

This is another form of disease which comes from the fatherland of exanthems, Africa, and was first described in the ninth century by Rhazes. It is as contagious as the small pox, and has its own miasma.

The characteristic signs of the measles are catarrhal; dry cough, sneezing and flowing from the nose, pressure and burning in the eyes, oppression of the head, swelling of the eye lids, short breathing, rough throat, sluggishness of the body and mind, &c. After and during these disorders fever ensues, at first with intermitting chills, afterwards the heat becomes augmented and continuous. Generally on the third day, sometimes with convulsions, the eruption makes its appearance, first slowly on the face, then on the other parts of the body. The cough usually continues from the presence of the eruption in the trachea and bronchial tubes.

It is mostly a disease of children, from their second

eruption on the udder of a cow, wetted with milk repeatedly, heals easily and without leaving a mark behind. It finds some admirers, because milk costs something, and water nothing.

to the fourteenth year. Sometimes it is complicated with croup, or small pox, or scarlet fever, &c. Thus Dr. Pechlin saw a case, where on the right side were small pox, and on the left measles.

There are four stages:

1st. That of feverishness, which lasts two to three days, and may be easily mistaken for a catarrhal affection;

2nd. That of eruption, which lasts twenty-four to thirty-six hours;

3rd. That of efflorescence, two days, the cruption looks precisely like the inflammation after flea-bites;

4th. That of desquamation, three to four days, the scaling off of the cuticle is not always perceptible.

The putrid and malignant character of the measles proceeds from the specific nature of the epidemic, or from bad treatment or constitutional vices.

The treatment may in most cases be confined to a simple vegetable diet, and a careful protection from taking cold. It is only when, during the precursive period of the measles, the fever becomes violent, and great heat and dryness of the skin *impede* the cruption, that we apply the wet sheets, in the same manner as in scarlet fever, and with all the precautions mentioned above. We continue with them till the skin has become soft, at the same time drinking freely is to be advised, as powerfully assisting to develop the eruption.

When the eruption has made its appearance, we had better let nature alone, unless the skin should again get dry and hot, when a few wet sheets should be given to soften it. If the eruption is gone back,

and the skin is dry, a few buckets of water poured over the head and body, followed by enveloping, will counteract the tendency of the disease to settle upon internal organs, even though it should not re-produce the cruption. Organs which are particularly attacked, we cover with wet compresses, besides the enveloping.

Diarrheas, which may remain after the measles, we subdue by a mucilaginous diet, such as rice, slippery elm, gruel, tapioca, arrow-root, &c., or papmade of wheat flour, which has been boiled several hours in a cloth, by compresses over the whole abdomen, and two to three cold injections daily.

A disease which is connected with inflammation of the eyes, of the inner membranes of the nose, (organs so near the brain,) of the windpipe, of the lungs, and of the whole skin, seems certainly to be of great importance, and yet there is no doubt that nature always carries it through without difficulty, if physicians would only remain passive watchmen to prevent mischief, from obstacles thrown into the way of nature. The principle thing is the hygiene of measlepatients. They must be prevented from taking cold; the temperature of the room be between 65° to 68° F., the chamber well aired; the drink water, milk and gruel, the victuals simply vegetable. Some physicians, footing on the old latin rule, "superflua non nocent," which is grossly untrue in medical matters, generally change the normal course of the measles into an abnormal one, and we see daily the miserable consequences.

### XIV.—OTHER ACUTE ERUPTIVE DISEASES.

In regard to acute eruptive diseases, as the Purples, Netttle-rash and Red-measles, I mention only, that no particular treatment is necessary besides two daily washings in tepid water of about 68° F. and drinking; and if there should be any difficulty, we may easily overcome it by following the relative advice, given above, in the treatment of the scarlet-fever.

But in order to show, in an interesting case, the application of the water, I give the narrative of Dr. Weiskopf.

He was called to the sick-bed of a little girl, nine months old, who was suffering from the following symptoms, indicating, Miliaria cum angina membranacea et pneumonia, (an eruptive sore throat, with croupy cough and symptoms of inflammation of the lungs.)

The body was hot, skin dry; in face, chest, on the inner surface of the upper part of the arm, here and there small, half-flat red elevations; head very hot, eyes inflamed. The child breathed very hard, with head reclined and straining; the cough was rough, barking, and made her cry. About the top of the wind-pipe it was swollen and painful to the touch; no stool, pulse rapid and corded.

Dr. W. immediately put the child into a half-bath of 62° F., which was deep enough to cover half of the body, and kept it there, under constant rubbing of feet and legs, till a chill ensued, and the most urgent symptoms were subdued. During this bath he applied cooling bandages to the head and throat. After,

by means of rubbing, the natural warmth of the body had returned, he put the child to bed, continuing to renew the cooling bandages on head and throat every five minutes. He gave besides a cold injection of about 65° F., and urged the drinking of water. After about three-quarters of an hour an exacerbation took place, and the child was packed in a wet sheet, which at first had to be changed every quarter of an hour. The inflammatory symptoms yielded by and by, the wet sheet needed seldomer to be changed, and towards evening the child could remain in pack till she sweated. After a sweat of half an hour, she was quickly washed off in water of 62° F., and the whole body was covered with perfectly developed measles. There was but little fever; the cough loose; the breathing easy; the child vomited repeatedly tough matter, like membrane. Dr. W. ordered, in case of exacerbation, during the night, renewed packings in wet sheets, soothing bandages round the throat, and much drinking. The grand-mother of the child, who came to visit the little patient, prevented these packings, and though the croup was conquered next morning, an inflammation of the lungs had made its appearance,\* (the eruption was, notwithstanding, excellent.) The child was then put in the half-bath, treated as before described, and, after reaction, again packed in wet sheets, which were renewed as above. To-

<sup>\*</sup> This inflammation could certainly have been avoided, if at the least sign of exacerbation the wet sheets had been applied, but such is the folly of ill-understood kindness, that people will often act against their own interest.

wards the evening the child sweated a little, was now washed in water of 72° F., and compresses put on the chest, which were renewed every half hour.

The whole condition was mended, and the patient lively. But when towards midnight another exacerbation took place, the grand-mother again interfered and prevented the ordered application of the wet sheet. Of course the child was far worse towards morning. Dr. W. refused to attend any further to the little patient, till the parents promised unconditional obedience to the prescriptions. The greatest vehemence of the inflammation was broken, and Dr. W. therefore confined himself to wet sheets, which were changed or entirely set aside, according to the circumstances.

# XV.—TETTERS, (Herpes.)

Is a chronic exanthem, where on a red basis of the skin some pustules stand, but not as in other eruptive diseases, every pustule having its own area. These pustules disappear and reappear, form scabs and crusts, exude generally a sticky, sharp fluid, increase on the affected parts, and are attended with itching, burning, and redness of the skin.

We distinguish particularly:

1. The common Tetter, appearing most frequently on the face, chest, upper and lower extremities, particularly on the elbow; forms in the beginning a red spot, on which groups of small vesicles are seen; they flow together, exude a yellow-whitish, transparent fluid, then dry up, and form a cracked, dirty in-

crustation; under this scab a similar fluid, as above described, is constantly collecting.

- 2. The humid Tetter, (Impetigo,) makes its appearance in forming a dirty red spot on the skin, on which numerous vesicles come forward, which contain a purulent fluid, break and form a scab of a grey-white, dirty colour, consisting of several layers; the skin below them is always corroded.
- 3. The furfuraceous Tetter forms innumerable small vesicles on the surface, containing a mild fluid; they itch and burn very much, burst soon, and convert the skin into mealy incrustations; so that the surface looks as if flour or bran was strewed on it. If we wipe off this incrustation, the skin under it appears red, uneven, and somewhat sore; but soon a new incrustation is formed on it.
- 4. The Fish-skin or Scaly-Tetter, (ichtyosis simplex,) is very much like the furfuraceous tetter; it only differs in the size of the scabs or scales, and that here two or three layers are, at the same time; they itch far more than the other.
- 5. The Shingles, (herpes circinatus,) are of a red colour, surrounded by a violet or purple area. The small vesicles which are somewhat raised above the surface, are arranged in groups, burst soon and form a scab, under which matter is formed.
- 6. Another kind of tetter, *Impetigo rodens*, deserves particular attention; it principally attacks girls before their entrance into womanhood, and when their menstruation is disturbed. It appears always on one or the other wing of the nose, where the connection of the wing with the check is formed, in

a dark-red spot, on which several pointed pustules arise with a violent burning sensation. They soon burst, eject a yellowish-gray matter and form a greenish-brown scab, below which the small muscles of this region and the tender cartilage of the nose are slowly destroyed, so that often nose and cheek are very much disfigured, if the disease be not early arrested.

These eruptions attack persons of every age and sex, but in children appear principally on the head and face; in the period of puberty, on the breast; in middle age, on the abdomen; and in old age, on the legs. They affect also the joints and spaces between the fingers. They sometimes confine themselves to certain parts, and at others spread quickly over the whole body.

Tetter is distinguished from other exanthems by being preceded by a slight, chronic inflammation of a part of the skin which is somewhat swollen, red, stretched, with the sensation of itching and burning. The eruption does not become paler by pressure with a finger. The secretion destroys the skin and produces scabs, under which the secretion goes on, and a new scab is formed, when the old one is thrown off. The suppression of this exanthem produces affections of the interior mucous membranes, obstinate, frequently fatal looseness, dysentery, chronic catarrh, asthma, scrofulous discharges from the ears and eyes, leucorrhæa, &c.; swellings, indurations of the liver, spleen, uterus, glands, bladder, and therefore dropsy, jaundice, chronic inflammations, functional or even organic diseases of the heart and large vessels, epilepsy, apoplexy, melancholy, mania, amaurosis, paralysis, hypochondria, hysteria, spermatorrhæa or involuntary seminal losses, and in short, almost any of the whole legion of chronic diseases, except syphilis and sycosis, which proceed only from their own specific virus.

The immediate exciting causes are either local, viz: suddenly suppressed perspiration, uncleanliness, damp rooms and climate, want of change of bed or bodylinen, new houses, tight dresses, quick change in the temperature, night-air, exposure to the sun, working in wool and oil or in mines; rough, hard-rubbing and skin-irritating woolens, hairy dress; irritating salves and blisters, contusions with excoriations.

The causes affecting generally are: bilious disorders, anger, fright, grief, gastric impurities, use of spirits, sharp, salty, spiced and smoked food, fat pork, too much animal food; torpidity and induration of the liver and spleen, suppressed bleedings and footsweats, quickly-healed ulcers, excesses of every kind, &c.

Though the above-mentioned different divisions, to which I could have added one or two more, indicate a difference of form and extent of the disease, the distinction is of no value in the treatment. The diet of the mother or nurse is the principal thing to be attended to, if an infant is affected with tetter. She must then be very strict. For children I recommend a simple milk-diet; and in case of indurations we may give some meat, fruits and sour milk with bread. The cure of children is favoured by their greater power of reaction; but where the disease has

become constitutionally rooted, it is very slow. To wear continually on the affected parts wet bandages, covered with dry ones, having them always renewed whenthey begin to get dry, is a "conditio sine qua non." We sweat the patient daily twice, either in dry linen sheets or in wet ones, according to the condition of the skin and of the nervous system. If the exanthem be very extensive, and hot and burning, we use always the wet sheets; after these envelopings we give the patient a bath of about 64° to 70° F., wherein he remains from five to ten minutes: we then rub him off first with a wet towel and afterwards with a dry one. The patient must drink a good deal of fresh water, and at least twice a day be brought into the open air. In this manner we easily bring the disease from the interior to the surface, and cure radically, which nothing else is able to do.

I knew an interesting case of herpes or tetter, treated and cured by Priessnitz in the following manner:

A gentleman, 45 years of age, of a full body and good constitution, was afflicted with "herpes madidus" on both calves, and on the right arm. He had visited, without any real or lasting benefit, the mineral-baths of Toeplitz, Gastein and Johl, and been subjected for six weeks to a mercurial-cure in Vienna.

Priessnitz ordered two sweats every day for two hours, (counting from the beginning of the sweat,) followed by a cold plunge-bath; one sitz-bath of twenty minutes, and to renew the exciting bandages on the afflicted parts six times a day. These bandages were kept on during the envelopings. After some weeks the exanthem on the calves began to get

drier, and the skin looked better. At this period a great many ulcers made their appearance, mostly on the back, and the fingers began to swell, to burst and to throw out a great deal of matter. Some weeks later the patient was attacked in the evening by a chill; he felt the morning after the sweat a perfect prostration, so that he gave up all hope of life. This difficulty was removed by means of five envelopings in wet sheets, which were always, after a quarter of an hour, renewed. In the fifth sheet he remained about half an hour, till the body got warm, this was again followed by a tepid bath of 65° F. for eight minutes, in which he was washed off. He got a good appetite, grew soon strong, and was, after some sweats and rubbings off, declared well.

If this diseased condition proceed from menstruation, scrofula, or mercurial poisoning, we must keep up the appetite by spare non-exciting diet, and the bowels regular by drinking, bandages on the abdomen and injections.

# XVI.—SCAB ON THE HEAD, (Tinea capitis.)

Is a chronic inflammatory disease, sometimes of the skin of the head, at other times of the roots of the hair, caused by an abnormal secretion of lymph, which in drying off, forms a scab with ulcers under it. Nosologists distinguish two species of this disease: Porrigo favosa and Tinea capitis vera hereditaria. It is sometimes contagious and sometimes not contagious.

The favous scab on the head is often of a cri-

tical nature. The pustules are small and red, secrete little lymph, and do not destroy the roots of the hair. They generally appear on the neck and back of the head, are easily scratched off, when great itching follows, a portion of lymph exudes, and a new scab is formed, &c.

The sudden disappearance or suppression of this eruptive disease may produce malignant fevers, convulsions, inflammations of the eyes, suffering in the lungs and tumors.

Another more malignant kind of scab on the head is the hereditary one, or tinca vera, the "teigne annulaire" of the French. It is always contagious. The pustules are from the beginning larger and nearer together than in the favous species, they itch much, and discharge a tough, sweetish, acid matter, having the disagreeable smell of the urine of a cat. In time the pustules become larger, discharge a very tough and thick matter, form greenish, grey or black crusts, and eat deeper into the tissues, increasing and getting worse and worse till the whole head is covered with a crust, containing holes, out of which flow a caustic fluid, destroying the roots of the hair, and even eating into the scull, &c.

The Milk-scab, (crusta lactea,) merits particular notice in this book. It appears generally between the sixth and eighth week after the birth of the infant, and seldom lasts long.

On the red basis there appear small pustules, filled with yellowish-white matter, very much like milk, and occasionally it spreads over the whole head.

It is not, however, necessary or important to enter

into further detail, as the treatment of the different forms of this disease are much alike. The causes are: Scrofulous constitution; neglect of the head and hair; uncleanliness; warm coverings of the head; irritation of teething, or infection. It is sometimes a symptom of syphilis, &c. In the treatment we must first remove the causes; observe the greatest cleanliness; give a simple, mild, nourishing diet, and cause the patient to take a good deal of exercise in the open air. He must then be sweated every morning in dry blankets from a half to one hour, as his strength permits; and cold wet compresses put on the head and neck, and renewed as often as it can be done without suppressing the sweating. This sweat must be followed by a washing off or a plunge-bath. The head of the patient should be washed three times a day, while during the rest of the day and night it is to be covered with a well-wrung-out, fourfolded compress. Water must be drank freely.

If the scab is a consequence of syphilitic or mercurial poisoning, it must be treated as these diseases (of which I do not speak in this book) and not as laid down in this work.

The bowels must be kept always in order by injections and bandages; for other difficulties in the abdominal organs, we must use sitz-baths. All the compresses and bandages ought to be washed often.

Children under two years of age must be sweated only every second day, and not over half an hour at one time. Infants who are yet nursed, must be weaned. The dict ought to be light and entirely vegetable, and any unripe fruit carefully avoided.

## XVII.—ITCH, (Scabies, Psora.)

This eruptive disease is divided into Scabies vera or real itch, and Scabies spuria or spurious itch; which latter is not itch, properly speaking.

The real itch is a chronic skin-disease. We discover first a burning sensation on the afflicted parts; then sometimes smaller, sometimes larger, hard and red knots, which either dry up in crusts and scale off, (scabies sicca,) or change into pustules with a conical and transparent head, which open by and by, and, as long as they are fresh and small, throw out a clear, sharp, serous fluid, but when they are riper and larger, a thick, yellowish, pus-like, caustic, musty-smelling matter, which corrodes the neighbouring parts, and produces new eruption and superficial ulceration, (scabies humida.) The real itch appears first between the fingers, then on the wrist, on the arm and knee-pits, and finally on the whole body. The face remains free from it, if itch-matter is not accidentally brought there. From the eruption to the bursting and drying up or exulceration of the pustules, and during the whole efflorescence, the patient feels a constant itching, which robs him of his rest and sleep, not only towards evening and in the night, but in consequence of every influence augmenting the temperature of the body, as the warmth of a stove, or of a bed, spiced food, liquors, passions, &c. Tender and irritable individuals only experience fever, alteration of general feeling, nausea, loss of appetite, &c. These attacks do not end at once, but reappear with every new eruption, which commonly takes place every eight to fourteen days after the desquamation of the former. If there is no remedy provided, the evil lasts for years; the exterior parts of the body get destroyed; the appearance gets frightful; the digestion and the appetite suffers; the stool becomes irregular; crudities and slime collect in the intestines; the abdomen gets puffed up; indurations form in the lymphatic glands, with drooping, pale appearance; hectic fever, large scabious ulcers, which discharge stinking, sharp, dark-red stuff, &c. Taking cold and medicines produce frequent metastases and an army of diseases, viz: cardialgy, épilepsy, jaundice, atrophy, asthma, pneumonia, phthisis, dropsy, ophthalmia, amaurosis, white swelling, arthrocace, orchitis, &c.

Dr. Most, not a water-physician, but an authority of the highest standing in the Allopathic drug-world,

says:

"No real physician will deny these horrible consequences, though there are young, inexperienced professors and stupid practitioners enough, who pretend to know nothing of these evils; for it is too difficult to explain the connection, and they themselves too proud to acknowledge the 'docta ignorantia.'"

To us this explanation is not at all difficult, but does

not belong to this little book.

The *itch*, or more properly the *itch-poison*, (psora,) is not simply confined to the exterior skin, but penetrates deep into the mass of fluids, has an enormous influence over the whole organism, and produces, when medically treated, always sooner or later, disturbing evolutions and diseases, as above-mentioned. The hydriatric treatment of the itch, though very

slow, particularly when of long standing, produces always a perfect cure without any evil consequences.

The first thing to be attended to, is the utmost cleanliness of the wash of bed and body. The patient must avoid all sharp, spicy, acid, fat food, and every kind of liquor or other exciting drink; he should exercise much in the open air and drink a great deal of water. According to the greater or less extent of the itch, he must, once or twice daily, be packed in wet linen sheets, well covered, and sweat in them two or three hours, without drinking any thing. After this sweat we bring the patient into a bath of 52° to 65° F., and let him stay in it till a perfect chill appears; he is then well rubbed and must walk in the open air. Besides this he ought to be thoroughly rubbed two or three times daily with wet towels on the whole body. If there are crusts on single places, we put well-wrung-out pieces of linen over it, and cover them with dry ones.

Dr. De Meyer gives the following account of a case of white swelling in consequence of a quickly cured (?!) itch:

Anton Kamrau, seven years old, hearty, of a healthy and strong appearance, and very quick temperament, had been in school infected with the itch, which the parents did not perceive till nearly the whole body was covered with the eruption. It was driven away in ten days by means of a green salve and baths of "Radix Helenii."

The boy, who began after that time to lose his blooming appearance and look yellowish, complained after five months, of stitches in the left knee, which in three weeks swelled so much that he could not go to school. The knee got daily worse, and finally suppurated, in spite of all the remedies applied since the beginning. The cause of the disease was sought in a fall, for which leeches, blisters, embrocations, warm cataplasms, &c., were applied. Soon afterwards it opened on the same leg, somewhat lower down.

The parents, startled by the physician's assertion that the child would, in the best case, remain a cripple, applied to me for water treatment.

After a searching examination, I found out that the psora which had been driven into the body, was the cause of the present condition. I found the child very much fallen away, and every morning attacked by a short chill and sweat following. The left knee was swollen to more than double its natural size. The swelling was elastic, and on different spots fluctuating, and had an opening towards the exterior of the leg, of the size of a small pea, the edges of which were raised, and out of which a corrosive, pus-like fluid was flowing. The bone below this wound, I found, by examining it with a silver probe, rough.

The patient who had been all the while confined to his chamber, was now immediately brought out into the garden, where he remained as long as possible. He received nourishing food of milk and meat. The wound on the knee was daily four times syringed with a common wound syringe slowly, and thrice each time, with water of about 52° F. I had the whole knee surrounded by bandages wetted in ice water. These bandages were in the beginning only

slightly wrung out, not covered, and renewed when they began to get dry. Besides this, I had the patient, during the first eight days twice, and during the following week, four times in twenty-four hours, rubbed off with a cold wet sheet.

After the boy had been strengthened through this treatment, so that I was permitted to resort to the necessary sweating cure, I had him sweated the first fourteen days, every morning, in a wet sheet for two hours; the next fourteen days twice daily in the forenoon and afternoon, for two hours, and in the succeeding two weeks, for three hours. In the first four weeks every sweat was followed by a bath of 52° F., three or four minutes, and after that by a bath of 45° F., for one or two minutes; he was all this time every day, besides the sweats and baths, twice rubbed off with a wet sheet, and well dried off.

The compresses round the knee were, after the first six weeks, wrung out better and covered by dry ones; for the swelling was much diminished, the whole region equally soft, and the matter better. These bandages were then only changed when they began to dry; the syringing was continued. In the tenth week of the water treatment, there appeared a constant itching, which was intolerable, particularly during the sweating, some small eruption, first on the thighs, then on the abdomen, on the hands, on the arm and chest, which after about fourteen days covered the whole body, with the exception of the face, and formed clearly a pure itch eruption. As soon as this eruption began to break out, I discontinued the rubbings off with the wet sheet, and used

only washings off in their stead. I discontinued the sweatings in the twelfth week. The ablutions were now applied daily four times with water of 65° F., for four or five minutes, and continued to the time of perfect restoration.

From the moment the eruption appeared on the surface, the swelling on the knee began to diminish; the discharged matter got healthier from day to day, and the opening more moist. After about twelve weeks, I ordered for three weeks more daily, two knee baths, of ten minutes each, and a douche on the knee, upper and lower thigh, applied from behind. Thus after fifteen weeks treatment the disease was conquered; the remaining weakness in the knee gave way to washings, which were continued after the restoration.

I myself have eured two cases exactly like this, and would have given them, if the parents of the patients had not been unwilling to have their names used. In the whole, I have treated and cured sixteen cases of different chronic sufferings, all of which were consequences of the itch and its medical treatment.

## XVIII.—FEVER, (Febris,)

Is a condition, characterized by chill, heat, irregular pulsation, weakness, thirst, nausea, anxiety, sweat, anguish and pains. Abstractly there is only one fever, as there is only one inflammation; and as there is only one health, there is only one disease.

The practitioners, however, cannot stop with these

philosophical reflections; he considers the appearances concretely, he specializes and individualizes. It is the constant complaint of drug practitioners, that the nature of fever is as little known to them, as the nature of life; such a definition as the above therefore is worth nothing. They are taught to content themselves with a description, or a sketch of the symptoms, and console themselves for their ignorance by considering that there are in this world a good many other things which we govern and use to our own comfort and benefit, of the nature of which we also know nothing. In seeming wisdom they confess the poor truth: that "our knowledge in this world is more a formal and empyric, than a rational and essential one." They caution every one of their own craft not to reason and think too much, because the practical knowledge was only wanted, and practical study should be by no means neglected for transcendental, hyper-physical speculations, or in forming useless and fruitless hypotheses and theories. Hahnemann declares, that, though men may never understand the nature of fever and chronic disease, yet if the truth were once found, it would be so simple, clear, and free from learned dialectic, that common sense would perceive it.

The practical eye of hydriatrics sees in fever an effort of vitality to resist some depressing influence, or to throw off obstructions. This action and excitement, whether of the nervous or vascular system, is for the most part confined within the body, instead of being expressed in external actions either of body

or mind. The duel is fought out in closed lists, unless the doctors interfere and make foul play of it.

"Fever is the effect of a violent exertion of nature, which exceeds the common and normal activity of the body."

Simple fever has only three symptoms: heat, quick pulsation and dry tongue, which are states consequent on any great exertion. Local complications occur in various organs previously weakened, or obstructed in their functions. The common termination of fevers which do not prove fatal, is by the excretion, called critical, of offensive matters, by the skin, kidneys or bowels. Such matters are either poison taken as food or medicine, not sufficiently irritating to have been thrown off at once by vomiting or diarrhæa, but incapable of forming healthy tissue, and remaining as permanent irritants in the blood, and to the organs to which this blood circulates. In other cases morbid matters are formed, and kept within the body in consequence of bad skin, and various disturbing causes, such as the various miasms of scarlet fever, vellow fever, remittent or intermittent fevers, cholera, &c., &c., or of reactions of the soul on the body, from the social evils and miseries which distract and torture life.

In the introductory remarks, I have shown by the highest drug authorities, that a great many poisons of different kinds have been found in the fluids and solids of the body. The analytical researches of Dr. Piutti, show to certainty, that the cause of disease is diseased matter, which by critical excretions is driven out from the body in consequence of its own exer-

tions, or thrown out in the sweats produced by the peculiar method of the hydriatric practitioners, viz., by packing the body or parts of the body in such a manner, that its own warmth is concentrated round the body, and thus the skin opened.

The collections of sweat made by Dr. Piutti, show the most different colours: clear, transparent, white, milky, yellowish, greenish, brown, thick, dark brown; thus, for instance, the sweat of a rheumatic sufferer would be clear and transparent; that of a person afflicted with gout, milky, thick; that of a patient suffering by syphilitic and mercurial diseases, thick, dark, with brown sediment.

The skin eruptions peculiar to the water-cure, are of the highest importance for the practitioner, and hardly understood in this country. It is an acknowledged fact:

- 1. That these cutaneous eruptions which make their appearance during a course of hydriatric treatment, are "sui generis;"
  - 2. That they appear in various forms;
- 3. That only some may be compared with the common bathing rash;
- 4. That the majority of them, particularly the more developed forms of pustules, furuncles and ulcers, are of a critical nature;
- 5. And that they are connected with the existing chronic disease, and the healing process.

They act clearly as the secreting organs, for dyscratic matters. The physician who denies that these eruptions, and above mentioned critical sweats are necessary to a cure, and that chronic diseases can as

well be eured without them; who, in consequence of a want of the proper appreciation of the fundamental principle of the water-cure: "THAT THE BODY ITSELF IS THE MEDICINE CHEST, AND THE WATER ONLY THE KEY TO IT, NOT MEDICINE," uses water according to a certain routine, or as if it was medicine, looking for its primary effect merely; who thus generally by overtreatment exhausts the peripherie organs, and the the body as a whole, and then by friction tries to excite action on the surface, by means of which he only makes the skin callous, and unable to aet as, "locus medicamentosus," (in the same manner as the drug practitioner destroys necessarily his locus medicamentosus, the stomach, by pouring unassimilable matter or poison into it,) proves himself to be as much a quaek as any other panacea-seller. It is true, that many of these eruptions, particularly the lower forms of red spots and rash, are often only consequences of irritation, and have no critical value. But even such a rash, if it is accompanied by fever, and extends over a larger surface, may be of a decidedly critical nature.

Dr. Piutti divides these eruptions according to their form, but hopes that time and farther experience and study, will enable us to make a more scientific diagnosis. He has observed these critical eruptions in twelve different forms, to which he gives the general appellation of

## EXANTHEMATA HYDROGENA.

- 1. Chloasma hydrogenum, (spots);
- 2. Urticaria hydrogenum, (purple, nettle-rash-like);

- 3. Strophulus hydrogenus, (little red knots);
- 4. Ezcema hydrogenum, (little blisters);
- 5. Impetigo hydrogena, (tetter-like scab);
- 6. Acne hydrogena, (pimple);
- 7. Ecthyma hydrogenum, (pustules);
- 8. Pemphigus hydrog., (larger blister);
- 9. Pompholyx hydrog., (largest blister);
- 10. Furunculus hydrog., (blood-boil);
  - 11. Carbunculus hydrogenus;
  - 12. Ulcus hydrogenum;

This last has, according to the experience of all, the highest critical importance.

We find, for instance, Ecthyma hydrog., frequently in scrofulous patients; Piutti observed it remarkably developed on a man who formerly had suffered from scrofula and coxar-throcace, and latterly from rheumatic coxalogy. The carbunculus and ulcus hydrog., I have seen in very bad cases of scrofula and suppressed lues. Pemphygus and ulcus hydrog., we see principally on patients who suffer from syphilitic and mercurial lues. Pompholyx we observe in the form of blisters, of the size of a walnut to a hand, on people suffering from general dropsy, a consequence of an affection of the liver. Every one whose liver is seriously affected, will receive a visit of such large blisters. But time, space and object of this book will not permit me to enlarge on this subject, and instances of observation; every hydriatric physician, who has sense enough to apply the water sensibly, and has eyes to see, and good will to acknowledge, will have daily opportunity to observe them.

Dr. Piutti has also shown me a quantity of a thick

fluid, filled with gont concretions and degenerated bone fragments, of which about ten ounces had been thrown out of the foot of an old gouty gentleman in six weeks, without much suffering; the swelling of the joints and bones of this foot, which had for six years, before he came to Elgersburg, a (water-cure establishment, of which Dr. Piutti is the eminently successful director,) distressed the sufferer, then disappeared, and the patient could use his foot again. The result of the chemical analysis of this case, I do not know; but I will add here the analysis of the sweat of a lady suffering from plethora vera and tabes dorsalis.

Specific weight-1.003.-1000 grains contain:

Natrum muriationm, gr. 3.3.

Ammon. phosphoricum, gr. 1.

Ammon. aceticum, gr. 0.5.

Ammon. hydrosulphuratum, a vestige.

Greenish matter indissoluble in alcohol, but dissoluble in ether, gr. 0.5.

Analysis of the sweat of a lady suffering from Arthritis chronica atonica.

Specific weight-1.004.-1000 grains contain:

Natrum muriaticum, gr. 4.

Ammon phosphoricum, gr. 0.8.

Ammon aceticum, gr. 0.6.

Ammon. hydrosulphurat, no vestige.

Animal substance, gr. 1.6.

Analysis of the sweat of another lady with Arthritis chronica.

Specific weight-1.005 .- 1000 grains contain:

Natrum muriaticum, gr. 3.

Ammon. phosphoric., gr. 0.5. Ammon acetica, gr. 0.5. Ammon. hydrosulphur, a vestige. Animal substance, gr. 0.5.

The chill is not the fever, but the preparation for the fever. And that the causes are noxious matters, which do not belong to the body, is so clear, that blind admirers of scientific darkness only can deny it. Does it not in all these diseases lie in and upon the diseased organs? Does it not pinch, burn, stitch and press? For instance, in inflammations of the lungs, does it not seem as if a fire-brand was lying on the lungs? Does it not sting as if red hot swords perforated them? Does not the poor sufferer cry, " Here it is! ah here it stings! here it burns! here it presses!" "O no!" says the wisdom of science, "you are very much mistaken, there are no foreign stuffs in your body, which torment you, it is -?" So far science, as it is, goes and stops, and the learned and honest physician acknowledges, he does not know: "What?" but the drug blockhead is contented with high sounding words, and learns them by heart, and pays the believing crowd with a coin that is worthless, but rings well. The very course a fever always takes, proves that we are right, for we have certain fever stages.

1st. Stadium prodomorum, which gives us the feeling of our being the dwelling of bad matter. We feel heaviness in the extremities, confusion in the head, restlessness, yawning, singing in the ears, difficulty in the eyes, bad taste in the mouth, laziness, less activity in the function of the skin, chilliness, heat, &c.

2nd. Stadium frigoris, where the body, by a perfect chill, prepares itself for violent exertion. Here the pulsation is small, quick, hard, muscles in some cramp, the cutaneous system not sensitive, respiration pressed, breathing short and quick. The blood has retreated from the exterior parts, from the periphery, and rushed to the centres; the congestion of the lungs, heart, bowels, brain, spleen and liver is therefore often very great; the secretions, viz., stool and urine, in this period, are frequently augmented, and sometimes death ensues by apoplexy, paralysis, &c.

3rd. Stadium caloris, that of heat, first dry, then moist, headache, delirium, pulsation strong, full, free, skin red, and this is followed by

4th. Stadium criticum, when the diseased matters are removed by some species of evacuation, through the openings of the body. We have the following critical excretions:

- 1. Bleeding.
- 2. Critical sweat.
  - 3. Critical urine.
- 4. Critical diarrhaa.
- 5. Critical vomiting.
- 6. Critical sulivation.
  - 7. Critical sputa from the lungs.
- 8. Critical eruptions on the surface.

The drug practitioner have

5th. Stadium, the stage of reconvalescence, which we do not know in hydriatrics, as any patient, treated from the beginning for a fever with water, is, immediately after the crisis, well and hardy and stronger than he was before the attack.

## XIX.—INFLAMMATORY FEVER.

This fever is generally complicated with a local inflammation, viz., inflammation of the lungs, brain, diaphragm, liver, &c. It comes suddenly with a strong chill without preceding chiliness. This chill lasts for one-quarter to three-fourths of an hour, and produces such a shaking that the teeth chatter. Great burning heat follows this chill, which diminishes under the touch of another person, and thus is not calor mordax, as in nervous and putrid fevers. Pulsation full, hard; sometimes suppressed, small, quick respiration; hot breath; dry, red tongue; red face and eyes; red, hot urine; thirst; headache; restlessness; violent, wild delirium; generally constipation; sickness of the stomach; inclination to vomiting; headache, especially in the forehead. The typus of the fever is a continua remittens; remission in the morning; exacerbation in the evening; clear consciousness.

In medical treatment, death ensues by paralysis, apoplexy, or an interior violent inflammation in the lungs, heart and brain, which produces mortification.

Two remarks may be here worthy of attention:

1st. The more violent the inflammatory fever, the quicker it passes into a typhus or putrid one: for instance, yellow fever and plague have but a very short inflammatory stage, and paralysis soon follows.

2nd. The weaker the constitution of the patient, the sooner the same result takes place. In old individuals, it passes into the paralytic character, and in children into the typhus.

Hydriatrics give us a most certain and speedy cure. We have to reduce the heat of the body which is augmented by the too rapid circulation of the blood, as quickly as possible, and to prevent the accumulation of blood upon the brain and other organs, and its thus impending decomposition. This we attain by envelopings in single or double wet sheets, slightly wrung out, and according to the degree of heat changed either every quarter, half or one hour. At the same time we put on the head wet bandages, covered with dry ones, which are far oftener renewed than the sheets are changed. We also urge the patient to drink water frequently in small quantities at a time.

As long as the skin is hot, dry, and brittle, we should neither wash the child, nor try to produce a sweat; this ought to be done only after the abovementioned envelopings have softened the skin. If the child has difficulty in swallowing, we put similar bandages to the neek as we use on the head, and renew them as often as they get warm.

When the head of the child gets freer, the eyes clearer, the tongue moist, and the skin soft and clammy, we may wash the child in water of about 60° F., and in case of pains in the throat with water of 70° F. Thus wet from the washing it is enveloped in dry sheets, put to bed, moderately covered, and sweat expected. If, after some time, about an hour, no sweat appears, but heat returns, we renew the packings in wet sheets, as above. We wash the sweat off (which sweat may last half an hour) in water of 05° F.

If every symptom of the disease has now disappeared, we wash the child in water of about 50° F., and let it take exercise in the room. But if there are some eruptions approaching, we take water of about 70° F. and repeat the washing four times a day.

Thus, with hydriatric treatment, we conquer this enemy easily in two days. If there is no local suffering connected with it, the recovery is very quick and erfect.

Dr. De Meyer relates the following case:

I was called to a son of Mr. Golup, four years old; I found the boy throwing himself about on the lap of his anxious mother, suffering from really burning heat, which produced painful sensations even with his mother. The head was very much oppressed, the white of the eyes reddened; the face swollen and fiery-red; the tongue dry, dirty-brown, and like the lips, cracked. The child threw himself anxiously about and could not produce an intelligible sound on account of the dryness of his tongue; the breathing was rattling, and performed by the help of the muscles of the abdomen. The skin, which was very red, and in some places glazed into a yellowish colour, was dry like parchment and burning hot; the pulsation much accelerated, full, strained and hard; no stool in the last forty-eight hours, and the small quantity of urine, which the child was discharging with pains, had a brownish colour.

The boy was at once enveloped in moderately wrung out double linen sheets, in which he was packed from the head to the feet, and which I had changed in the beginning every twenty minutes; after-

wards, in the same measure as the fever decreased, every half, one and two hours; during the highest fever-state compresses of pounded ice were put on the head, and small pieces of ice, of the size of a large pea, were given in a spoon-full of water. Thus, in twenty-four hours the boy had mended so much that he could speak loudly, swallow well, and the fever and the heat was so far subdued, that the patient could be pronounced out of all danger.

In the morning of the 25th, at 8 o'clock, I had the boy, after he had slept well the greatest part of the night, (although disturbed by the continued repetition of the wet sheet,) and after his skin had become moist, packed in a single, well-wrung-out cold linen sheet, in order to produce sweat, which appeared in a little more than an hour, and profusely flowed for half an hour, while the patient drank freely of water. After this sweat I had put the child in an empty tub, and quickly washed off with water of 56° F.; without being dried off, he was enveloped in a dry linen sheet and brought to bed. In a short time I gave him a cup of fresh milk with some wheat-bread, which was his only nourishment for the next three days.

Towards the middle of the day the heat augmented again; I, therefore, had the patient enveloped every two hours in a single wet sheet, compresses of cold water put to the head, and gave him freely to drink fresh water without ice. At 10 o'clock the fever had entirely disappeared; the boy was then well washed with water of 52° F., and finally six quarts of water were poured over him. He slept then very well till

the next morning, awoke very lively and ran cheerfully about the room, after he had been washed off.

These washings were then during this day (the third of the treatment) repeated every four hours; after every one of which the child was brought to bed for a short time.

The next day, (the fourth of the water-treatment,) the parents, who had despaired of the restoration of their child, having grown worse during the foregoing drug-treatment, had the joy to see their child perfectly well.

#### XX.-GASTRIC FEVERS.

Febres gastricæ, abdominales, &c., are such as are consequences of impurities in the first passages, of local disorders in the æsophagus and gall-system, of disturbances in the functions of all the organs, which belong to the digestive apparatus, and end by critical vomiting and diarrhæa.

The symptoms of the status gastricus are: chill, with passing, often changing heat; feeling of prostration; rheumatic-like pains in the extremities; no appetite; disagreeable smell from the mouth; bad, bitter taste, or no taste at all; constipation; by and by inclination to diarrhæa. At once there appears a violent chill, followed by heat, thirst, headache, redness of the face, great debilitation, depression, sleep and restlessness, delirium; red, burning urine, with red sediment, or in the beginning, thick urine, (urina jumentosa,) with bran-like sediment. To this kind of fevers belong: Frebris biliosa, (bilious fever); f. pitui-

tosa, (pituitous); saburralis, (saburral); verminosa, putrida, &c.

The treatment, I recommend, is this:

If it be the consequence of over-loading of the stomach, particularly with fat victuals, we put the patient to a strict diet, give him much water to drink and much exercise in the open air. This treatment, appearing insufficient, we wash as usual, every morning, the whole body with cold water, and order, one hour before dinner, and one hour before supper, a deep sitz-bath, for thirty-five minutes each, (grown up persons may remain fortyfive to fifty minutes, of about 60° F.) After the bath we put a wet compress, covered with dry linen, over the whole abdomen, and renew it when it begins to get dry. If the sickness and the tendency to vomiting does not cease, we order copious drinking of water, up to eight quarts a day; one to two days of such drinking will generally suffice to remove all difficulties. By this treatment, either vomiting or diarrhæa soon makes its appearance, which we support by again drinking great quantities of water, till the gastric impurities are removed. After such evacuations we are soon restored to health, and it requires nothing but a moderate interior and exterior use of water, and a careful diet for some time longer, to make and keep every thing right.

But if the disease is the consequence of taking cold, or perturbation of mind, the treatment is different, particularly if the fever is very strong during the night,

and the sleep restless and troubled.

Dr. Weiss strongly recommends the following

course of treatment in such cases, and I myself have found it, in an extensive practice, admirable:

The patient is, towards evening, when the disease exacerbates, enveloped in a wet sheet; in which he remains one hour. He is then taken out, and packed in a smaller, well-wrung-out one, which reaches from below the arms down to the knees, (the arms and legs below the knees remain free.) He is thus packed, but not so tightly as usual; is later in sweating, and remains in the sweat one hour. This sweat is followed by a plunge-bath of common temperature. In winter he is put into a half-bath of about 60° F.

To the question, "Why the loose enveloping and the small wet sheet?" Dr. Weiss answers:

I have often found that my best servants left my patients frequently the greater part of the night in the sweat, so that they were perfectly exhausted in the morning, when they went to the plunge-bath. But that is not the only reason; many other inconveniences arise during the night, if the patient is packed so that he is entirely helpless. Patients sleep in such a loose packing quietly, and they can alter their position and cover themselves more or less, and then, in the morning, they begin to sweat and come strengthened from the bath.

The patients have, every four hours during the day, to wash the whole abdomen with cold water for some minutes, or to take short sitz-baths of five to eight minutes. Long sitz-baths are to be avoided, because they disturb the digestive organs still more, and produce dangerous diarrhæas and difficulties in the liver, and other sufferings. Constipation must be

counteracted by injections and well-wrung-out compresses round the stomach, even if in a day six to eight injections were necessary. (Compresses to be renewed when entirely dry.)

Sometimes these gastric fevers are accompanied by looseness of the bowels. Here the patient has particularly to drink much water; the number of glasses cannot be given, it depends entirely on the individuality of the sufferer.

If the first days have passed with bathing, sweating, daily application of two to three injections and much water-drinking, as above prescribed; and if the bowels and stomach have freed themselves of the gastric impurities, a moderate continuance of the treatment is to be recommended. We use ablutions, and cease the fourth day to give any injections, as these would sustain the diarrhæa and weaken the patient. The drinking of water should be also reduced, and a warming bandage is put on the stomach. These bandages remain often all day long wet, which proves the want of warmth in the digestive organs. We subdue obstinate diarrhæas by short sitz-baths of cold water and a mucilaginous diet.

## XXI.—PITUITOUS FEVER.

Febris Pituitosa is a diseased condition of the mucous membrane of tubus intestinalis, as a consequence of imperfect preparation of the blood, which is again a consequence of imperfect assimilation and chylification, caused by a defective influence of the organic nerves (of the nervus splanchnicus and va-

gus) on the process of assimilation. It differs from gastric fever in the accumulation of slimy instead of gall-impurities.

This fever has a long stage of premonitory symptoms, such as indigestion, bad taste, diarrhœas, swelling of the stomach, much production of slime, &c.

The fever begins with slight chills, followed by heat and sweat, in consequence of which the patient feels exhausted; the remissions and exacerbations are scarcely to be distinguished; the face swells somewhat, the lips become blue, and blue rings encircle the eyes; the tongue, teeth and gums, are covered with slime, the saliva gets a slimy quality; there is a feeling of pressure in the pit of the stomach, with nausea, vomiting and great depression of spirits. In the spring, this fever has often a sub-inflammatory character; in the summer, it is sometimes complicated with gastric fevers, and not unfrequently takes a nervous character.

In a judicious water-treatment it never has yet passed over to putrid or nervous fever.

We must put the patient, before all things, into a dry, clean room, change his clothes often, and avoid any slimy victuals or drink.

After we have freed the stomach and bowels by copious drinking and injections from the impurities collected there, we subdue the fever and night-sweats by envelopings in wet sheets and cold ablutions.

It is, on account of the fever being slight, not necessary to repeat these wet sheets in immediate succession; and we may let the patient remain in the first wet sheet till his skin gets moist, when we wash him off with a dripping wet sheet. These envelopings and washings we repeat in the forenoon and afternoon. After the washing off, some exercise in the open air, if possible, and drinking is advisable. During the night the patient has to wear a well-wrungout compress on the stomach.

If the patient suffers from constipation, we give three to four injections, and sitz-baths, daily, of ten minutes each. Even after the patient has got rid of the fever, there is sometimes remaining a debility in the digestion, which we remove by a daily washing of the body in the morning, by drinking freely of water, and by washing the whole abdomen three times a day.

#### XXII.—CATARRHAL FEVER.

Like Rheumatic Fever, it appears in different degrees. It is the consequence of retentions of cutaneous secretions, and of taking cold after great heat, and is always connected with inflammatory irritation, serous and fibrous membranes as a substitute for the action of the skin. We call this irritation catarrhal inflammation, and it is classified according to the principal seat, as: Ophthalmia catarrhalis, catarrhus nosi et pulmonum, angina catarrhalis, catarrhus vesica urinaria, &c.

It is a very great mistake to suppose, as is generally believed, that such colds must be treated and prevented by keeping the body very warm, or by sweating a great deal. Daily experience shows, that

this very practice is only too frequently the cause of incurable lung-diseases, bronchitis, &c.

The patient should keep as much as possible in the open air, or in a cool room, about 60° F., and never suffer himself to remain inactive, or to lie in a warm bed, or to sit sluggishly or quietly. Besides this, he should be washed in the morning and evening with water; or, in case of high fever, enveloped in one or two wet sheets in the morning and evening, and remain in them till he is perfectly warm. He will thus by and by perspire during the night involuntarily. In this sweat he should remain till he feels uncomfortable, in consequence of congestions to the head and chest, which cooling bandages and drinking will not subdue. After this shorter or longer sweating, wash the patient off with water of 65° F. (Snuffing and gargling with water is very advisable.) In case of any pain, put cooling bandages to the spot, often renewing them, till sweat makes its appearance, when all local applications have to cease. Constipations are to be treated with injections of tepid water. Let the diet be simple. In this manner we not only cure colds, but diminish by and by the disposition to take cold.

Dr. Hedenus, in Freiberg in Saxony, gives us the following interesting cases of febris catarrhalis cephalica, quasi epidemica, a disease which we find so frequently in this country, ending often fatally in the drug-treatment. There is every where in the spring the catarrhal tendency predominant, particularly if the changes of the weather and temperature are very sudden:

After the weather had been stormy and cold in the last days of April, a beautiful warm air sprung up on the first of May, and continued for some time. The children were running about in the open air, but the strong influence of the unwonted heat produced a sudden expansion of the blood, much augmented transpiration, and great irritation of the brain. Under such circumstances the slightest cold must produce the most dangerous consequences, according to the usual unnatural regimen.

Dr. H. was, on the 7th May, called to see three children; they had been running about all the preceding week, even during the hottest hours of the day, and returned on the previous day, late at night, from a party into the country. E. and B. had already suffered for some days with a slight cough. A few hours after retiring to bed, E., only five years old, appears very restless, has great heat and is delirious. When Dr. H., at 4 o'clock, A. M., was called, he found the boy in a great fever, with fiery red face, dry heat, anxious look, delirious. B., four years old, rolled himself about in his bed, had great fever-heat and quick pulsation. A mustard-plaster on the calves, and a nitrous potion was ordered for E., who not only vomited the potion, but also a dose of calomel. The substances thrown up with the medicine, were of a bilious and slimy nature; Dr. H. gave on that account, in the much-desired drink-water, a solution of tartar emetic, which brought on again a throwing up of the same matter. But the condition of the patient was not at all mended. The younger and stronger brother was, the following night, attacked in the same manner, with only this difference, that an inflammation of the brain seemed to be combined with the other symptoms. Leeches on the neck, blisters on the calves, solution of tart. emetic, and afterwards calomel, did not produce the desired effect; the patient grew worse. The skin was burning hot and dry, whilst a good and general perspiration broke out with the older brother.

This unlucky condition continued for three and a half days, when the parents were persuaded to try the water-cure, which was then applied with the sanction of Dr. H.

The cure began at 6 o'clock, P. M. of the fourth day, was continued for three days, and the washing off and enveloping in wet sheets repeated every two to six hours, till the fever was entirely subdued. On the third day a strong eruption made its appearance all over the body of the children. Both children got soon entirely well.

Dr. H. treated then a third and fourth case of a similar kind, only with applying cooling bandages to the head, which seemed to him sufficient, besides drinking and attention to the bowels.

## XXIII.—INFLUENZA.

La Grippe, cholerine of the French, catarrhus epidemicus, is a miasmatic, epidemic and contagious disease, which appears in certain periods, and spreads over a great part of the civilized earth. It is seldom fatal, and remarkable only for the rapidity with which it affects the inhabitants of the region where

it appears. For instance, it prostrated in December, 1781, in Petersburg, in one day, forty thousand persons; it spread from thence over Poland, Denmark and Germany; appeared in June in France and Spain, England and Scotland, and reached in September North America. In 1831, there were in Berlin thirty thousand individuals attacked, and in Paris forty-five thousand, &c.

That the cause of this disease is a winged animalcule, I have contended in a former work on the principles of hydriatrics, and later observations and studies have only tended to strengthen me in the belief of its truth.

Sudden attack, debility, vehement headache, chill and heat, delirium towards evening, nausea, thirst, red urine, quick breathing, roughness in the throat, bad cough, frequent sneezing, dry nose, pain below the sternum, frequent constipation, are the general symptoms. A general sweat, flowing nose, slight expectoration, thick sediment in the urine, are critical solutions of nature.

The consequences of mal-treatment are violent fevers with adynamic character, local inflammations of the lungs, pleura, brain, &c., which may be fatal on the fourteenth or twenty-first day; or we see the patients suffer from catarrhus pulmonum, blenorrhæas of various kinds, phthisis, febris hectica, &c.

We simply apply, in the beginning, cooling bandages to the head, renewing them often, and recommend cool rooms. The patient must keep cold water constantly in his mouth, and snuff it often. He is to be three to six times a day enveloped in wet sheets, and washed off with cold water. This being done, day and night, in the first two days, generally prevents the regular course of the disease.

If the patient should, on the fourth day, feel no alleviation, and if there should be no critical sweat and urine-secretion, it is necessary to excite sweating by remaining longer in the wet sheets, and to keep it up for some hours in a moderate manner, particularly when the patient feels easier from it. After the sweat he is washed with water of 65° F. Some exercise after this washing is necessary, if possible, in open air. We repeat such envelopings till the critical secretions are produced, and then we give the body as much rest as possible, limit the gargling and snuffing, and cease to use the cold bandages.

Dr. Weiss recommends, for the severe cough, which might in some cases remain, nothing but frequent rinsing of the mouth with cold water; for constipation, injections; and warns old persons against a too great extraction of heat.

# XXIV.—INTERMITTING FEVER, OR FEVER AND AGUE.

They take their name from their typus, which is certainly very curious, and discloses to us something in their nat re, analogous to epilepsy, catalepsy, and St. Vitus's dance, which are distinguished by periodical artacks.

The difference lies particularly in this, that in intermittent fever, the system of nerves of the digestive organs, and of the spinal column is principally affected; in epilepsy and catalepsy, the brain is generally the seat of the disease.

This fever is frequently epidemical, and returns in certain regions every year. It never attacks the tender infant, but children of a more advanced age.

The principal symptom is, that the patient has, after every fever attack, a strong, often hou s-lasting chill. with following heat; a free intermission, when he feels apparently well, and, with a few exceptions, is able to attend to his duties, if the body is not yet too much debilitated in consequence of the too long duration, and frequent repetition of the attacks. The chill seldom lasts over one hour, is ve y vehement, and connected with blue lips, coldness of the extremities, blue nails, and chattering of the teeth; then appears the heat, with violent headache, quick, anxious b eathing, much thirst, &c., last ng from three to six hours, which is again followed by a moist heat, profuse sweat and alleviation of all symptoms. At last the patient falls asleep, and awakens well and hilarious, with some weakness. These attacks come on either every day, or each alternate day, or every fourth day. (Febris intermittens quotidiana, tertiana and quartana.)

The causes of the fever and ague are impurities of the stomach, suppressed activity of the skin, whilst diseased matters are under it, and a reaction of the organism against these evils. The fever is a desire to throw the noxious matter in the body out through the skin by sweat; the strong thirst during the period of chill, (which does not at all exist during the period of chill before inflammatory diseases,) is not caused

by the abnormous want of oxygen, but only by the want of dissolving fluids, and proves the intention of the organism to dissolve slimy hurtful stuffs in the stomach, and then to throw them out by means of vomiting and diarrhæa. A diseased condition of the stomach, produced by wrong diet, or by swampy admixtures in air and water, or by both evils together, is always at the bottom of this fever.

The drug treatment suppresses here, as every where, the acute symptoms, and changes the primary disease into a secondary one, that is, into a chronic fixing and fettering of the diseased matters in the body by debilitating the organs, which were active in their purifying process. The remedies are, bark, belladonna, arsenic, mercury. The tendency to cure proceeds principally from the stomach, the drug practitioner, therefore, suppresses the strength of the stomach, he weakens its power to free itself from disease, and contends that he has restored to health, whilst the acute symptoms of the primary disease are only removed, and chronic languor is put in its stead. Sooner or later the acute symptom re-appears, when the body is permitted to regain its original strength, and to struggle for its own salvation, or other sufferings follow, which are even more destructive than the course of the primary disease, would have been without any interference. The feeling of the patient tells him that the drug practitioner is wrong; physiology and pathology say the same, and the aftereffects of the poisoning procedure teach clearly the mistake committed by the physician. Yet in the face of all these facts and experiences, the drug-guild

dare to contend that they are able to cure a fever. The consequences are medicine diseases, indurations of the stomach, dropsy, enlargement of the liver with contraction of the heart, and similar destructive diseases.

Fever and ague in children requires particular attention to the diet. In the free time, much exercise is wanted in open air, and a daily washing off in the morning and evening with cold water. If the fever is connected with much aching in the forehead, inclination to vomiting, pressure in the region of the stomach and constipation, much water should be drank, and injections of water of about 60° F. given; every two hours a wet bandage should be put over the abdomen, and if this does not produce sufficient stool, sitz and half baths of about 55° F., must be resorted to, with constant rubbing of the stomach and feet.

As soon as a fever-attack approaches, we pack the little patient in a wet, very well-wrung out sheet tightly, in order to produce some sweat. Thus we mitigate in tender children the chill, which might be dangerous through the excitement and shaking of the nerves, and break it quickest, for the case is not unfrequent, that convulsions take place with the chill.

If the chill has changed into the period of heat, without sweat and inclination to it; if the skin is hot and dry, we must envelop the patient in another wet sheet; and renew this sheet, till the skin begins to get moist; at the same time the patient's thirst must be perfectly gratified, and cooling bandages put to the head. In this sweat the child remains till the whole

body is covered with perspiration, after which it is taken out and washed off with water of about 60° F., well dried, dressed, and brought into the open air.

Priessnitz gave the following advice, when asked, what the treatment of fever and ague was.

- 1. Put an exciting bandage round the whole abdomen, and renew it when it gets dry.
- 2. Sweat in the morning one hour, and wash this off in a tepid bath.
- 3. Take daily three to four cold sitz-baths for one hour, and rub the stomach, and the whole abdomen very hard; take this sitz-bath particularly on the appearance of the fever, and eat only farinaceous food.
- 4. You may with great success envelop the patient in wet linen sheets as soon as the fever appears, which sheets ought to be renewed when they get warm, after which take a tepid bath.
  - 5. Drink always, and a great deal of fresh water.
- 6. If the fever continues long, drink water to excess, so that you vomit, and repeat this two to three times a day.

#### XXV.—NERVOUS FEVER.

In the description, diagnosis and treatment of this fever, there has ever been and is still great confusion among the drug practitioners. Their prejudices, their devotion to theories, imperfect observations, arising from the partiality of the observer, and a thousand other causes have produced so many errors, that it is an impossibility for a practitioner to use any thing in practice. And this is the reason why, out of

a kind of despair, many a drug practitioner of former times has taken refuge in the use of cold water; for instance, Caldani, in Napolis, 1724; Larrey, in Egypt; William Wright, in Edinburg, 1779; James Charra, in Liverpool, 1787; Gerard, 1796; Currie and Brandis; Joseph Frank, in the hospital in Vienna, 1804; Hirsch, in Gold Cronach, 1806 to 1807; Colbany, in Pressburg, 1808; Froehlich, 1810, in Vienna; Huseland and others, whose names rank highest in the medical profession. Notwithstanding the recommendations, and the great success of these masterphysicians with their imperfect use of cold water, the professors of the medical schools made, in their chambers, new systems, and recommended new experiments with new poisons. Water was far too simple a means to be regarded with favour by them, and would it not have thrown all the beautiful mysterious theoretical labyrinths at once to pieces?

This tendency to shape the practice, at the sick bed, after the model of a theory, is the fault from which medical science has suffered most. Every physician, if he is not by nature a blockhead, soon finds, when he enters into practical life, that disease is in nature and on the sick bed, quite another thing from what it is in the heads and hand-books of the professors, and that to conduct it to a successful issue, he must be the humble servant of nature. By analysis, comparison and classification, he may elevate experience into theory, but he must never forcibly accommodate it to a theory.

Franke says: Nervous fever originates, after the body has received an impulse for the production of a

curative fever, and the nerves are too weak, and the cutaneous system too much debilitated to be able to perfectly produce the curative form of the disease.

This explanation of the nature of nervous fever shows the cause why real curative fevers in the hands of drug practitioners so frequently degenerate into nervous fevers. It is because, by means of bleeding and poisoning, the organism is deprived of the power to sustain, and to finish the curative fever, the nervous system being, by that treatment, broken down, and in consequence made unfit for any curative struggle; and finally, because through the want of applying water to the skin, in every fever and sweat, the cutaneous system gets so weakened, that sufficient critical secretions from the skin are an impossibility. Under such impeding conditions, the feverish excitement goes principally over to the nervous system, nervous torments combine with violent fever, and compose the disease which we call nervous fever. In the same manner, as a good man will become a bad one, if continually looked upon and treated as such, so a curative fever is frequently turned into a typhus fever, if looked upon with the eyes of Brownianism as a sign of weakness, or with the eyes of another 'Ism, as a sign of something else but the truth.

In hydro-therapeutics, we have no need to care much about the kind and form of the disease; but we treat the disease itself, and support the powers of nature in such a manner as is most conducive to the purpose.

The symptoms of nervous fever in general are:

fullness of the head, nervous pains, feverish pulsation, little or no refreshing, but dreamy sleep, and want of appetite.

The erethistic (irritable) form stands nearer to the curative fevers, and there is a greater power visible in every function of the organism. Dry and burning hot skin, quick and irregular pulse, excited state of the mind with delirium, frequent throwing about of the body, violent thirst, nervous and sometimes half-rheumatic pains, dry, brown, cracked tongue are the most prominent symptoms.

1. Nervous fever in a lighter degree without complicutions:

We pour water over the head for a short time, and wash the body repeatedly with cold water, dry it well off, and cover the patient carefully, in order to reproduce warmth. This proceeding we repeat always when the heat returns (every four to six hours.) We thus make the skin moist, the head free, and excite the nervous system of the skin to activity. After about thirty-six to seventy-two hours of such treatment, a strong sweat will take place, which is kept up by frequent drinking of water for two to three hours, and then washed off with water of about 70° F., in a bathing tub. The patient is then put to bed again, lightly covered, and as soon as any feverish symptoms reappear, treated in the same manner as before. In case of too much and apparently debilitating sweats, we make the covering lighter, and rub the patient off with cold water.

2. Nervous and putrid fever (typhus) in higher de-

gree without complications:

We put the patient into a half-bath, reaching up to the navel, (in the first nervous case of 68° F., and in the other putrid case of 52° F.,) in this he is rubbed all over, and every eight minutes a douche-bath out of a watering-pot, poured over the head for three minutes, till the whole nervous system is roused to the reaction of a perfect chill-tremor, (which shows itself by the rattling of the lower jaw.) After that he is packed in a woollen blanket, in order to excite the skin to sweat; when this is produced, we give plenty of water to drink, and wash him off after some hours duration, with water of about 70° F.; by these means we bring the patient back to the acute state under No. 1, and treat him as there prescribed.

If there are gastric complications, we should give in the beginning, (in order to dissolve the slime in the stomach,) every two minutes, half a glass of water, till nature throws off the disturbing causes by vomiting. Injections must be given according to circumstances.

The torpid nervous fever:

The patient shows entire want of sensitiveness, speaks stammeringly and slowly, half closes his weak eyes, sleeps a good deal, hears often with difficulty, and has a dry or cold sweat-covered skin, &c. The treatment must be adapted to momentary wants. As soon as the dry heat appears, the wet sheets are to be applied, and renewed every half or whole hour, until this heat is mitigated. Then the patient must be washed with cold water. At the same time plenty of water must be drank, and injected if the stool is not in order.

This is sufficient where the fever is not very malignant. But if the patient does not gain strength soon, or appears to sink more, we must pour water over him, before he is packed in the wet sheets; he must remain some hours in it, in order to produce, if possible sweat, in which he must lie as long as he can bear it, or does not get weaker. When we have gained by pouring water over him, and packing, a sweat, and a changed secretion of the urine, we then only wash the patient from time to time, and give him water to drink when he wants it. Sometimes the body of the patient is all the while covered with a sticky sweat, which produces no alleviation whatever. In such a case we rub him off repeatedly during day and night, with a wet linen cloth, till these sweats disappear. If with it the fever also disappears, no further treatment is necessary, but if this is not the case, we must apply the packing in wet sheets. After every packing, we have to wash the body with a wet sheet.

We must be very careful in point of diet, the return to the usual mode of living is to be only gradual.

I add now a case of febris nervosa inflammatoria, as treated and reported by Dr. Weiskoff:

A young man, aged thirty, of a sensitive constitution, observed upon himself no disease, until he was of the age of twenty. At this age he caught the itch, which he, after having tried a great many remedies, suddenly drove away with a red quicksilver salve. From that time, he suffered with various symptoms of uncomfortableness, low spirits, congestions, &c., for which he sought relief in vain from ordinary medical treatment. In the year 1839, he tried at Diefenbach the water-cure, and continued it at home for several months, and after the itch had returned again on the same places, and ulcers appeared, he was freed from his sufferings.

Some fourteen weeks after he had left the water-cure establishment, and the last ulcer on the left ankle was closing up, his feelings were very much wounded by some one, and he became so angry, that he immediately was seized with headache, fever and loss of appetite. A neighbour advised him to take some medical poison, but he grew worse. On the fifth day my advice was asked for. I found the sick man out of his mind, delirions, with a very red face, hot head, and dry, brown tongue, great thirst, and short, quick breath. He had a slight dry cough, the abdomen was somewhat swollen, but not sensitive to the touch. He had daily from six to ten thin stools, the skin was burning dry, the pulsation quick, and rather hard.

With a great deal of trouble, I succeeded to bring the patient into a half bath of 66° F., and had him rubbed there for nearly one hour all over the body, till the fever decreased, and the breathing was lighter. A chill took place whilst in the bath, which was overcome by strong rubbing, while he was still in it. On the head and breast cold bandages were applied, which were renewed every five minutes, they were continued after he was dried off and put into bed, quieting bandages, renewed every half hour, were applied to the abdomen. His head became clearer, and soon after the bath he went asleep.

But as after about an hour the former state returned, the patient was enveloped in a wet sheet, which reached to the knees, and which was renewed every quarter of an hour.

In the evening, as in spite of all the applications, the disease had not diminished, he was again put into the half bath, as in the morning, whereby his whole condition was somewhat alleviated. After one hour and a half, the symptoms again reached their former height, and during the entire night, bandages and envelopings were continually renewed.

On the morning of the second day of the watertreatment, the seventh of the disease, he was not better; the fever, delirium, the difficulty in breathing was still as great, and the diarrhæa continued. The patient was treated as on the first day, and the result was the same. As the disease continued with the same degree of intensity, and the same indication remained, to subdue this inflammatory nervous irritation, the patient was treated in the above described manner, until the ninth day of the disease. On this day, at 4 o'clock, P. M., the delirium accompanied as it had been with loud speaking, had changed to an unintelligible whispering. The fever had, however, diminished, the pulsation had become softer, slower and fuller, the skin was soft, less hot, breathing easier, and the tongue on the sides was moist.

Foreseeing an approaching crisis, I left the patient in the wet sheet, until he sweated; the bandages over his head and breast were wrung out dryer, and te first were changed every half an hour, and the second every hour. After an hour the patient ceased his de-

lirous whispering, went asleep, and broke out in a strong sweat, which lasted till half past 11 o'clock at night; he then woke up, was perfectly conscious, and asked himself to be washed off. This was done with 66° F. water, and after going to bed, he slept quietly until 5 o'clock in the morning; he sweated again a great deal, and was again washed off.

At 7 o'clock in the morning, the 10th day of the disease, and the fifth of the water-treatment, the patient was in the following state:

He sat up in bed, complained of nothing but weakness, his face was pale, tongue moist, the brown crust of the tongue came off, he had a loose cough, and vomited a great deal of frothy spittle, the breathing was free, the abdomen was soft, the skin the same, moist, cool, covered with a small pointed pustulous exanthem, his stools were soft. The pulsation, except a great degree of fullness, was in normal state. He had some appetite and slight thirst. He knew nothing of his disease, except the medicine he had taken.

He was ordered now a light nourishing diet, with a daily ablution.

Under this treatment, he improved visibly and rapidly. A few pustules of the above mentioned eruption became furuncles, and the latter ulcers, which healed very slowly. In the course of a month, he appeared so strong and well, that every one was surprised at it. Since that period, he has enjoyed good health, and is an enthusiastic convert to the cold water treatment.

## XXVI.—TYPHUS ABDOMINALIS,

(Gastro-enteritis nervosa.)—Typhus is every fever with real adynamy-astheny—prostration of the vital activity in the blood and muscle system—it is therefore the opposite of the inflammatory fever, it is of miasmatic origin. We divide it into three stages:

1st. The first, lasting from four to seven days, has all the symptoms of a gastric fever, with heavy pain in the forehead; dizziness; weak, glassy eyes; pale, yellowish-green colour of the face, depression, covered tongue; loss of appetite; nausea; mucous diarrhæa; restless sleep. Characteristic is a pain in the iliocæcal region, if we press hard and deep with the hand above the os pubis, where the musculus abdom. obliquus internus, and the musc. rectus converge, and towards the hip joint; the other parts of the abdomen are painless.

2nd. Is the stadium torpido-nervosum. The abdomen is swollen and hard, the pain in the above mentioned region of the abdomen is more violent; the stools are very frequent, (in twenty-four hours eight to twelve,) slimy, brown, bloody, very bad smelling; dry tongue, which as well as the nose, teeth and lips are covered with brown crusts; eyes are languid; no complaining, but about weakness, &c.

3rd. The third stadium soporosum or paralyticum. The abdomen is swollen, hot, rumbling after pressure; the excretions of urine and stock are large, frequent and involuntary; constant delirium; great debility; the patient sinks in bed towards the foot; extremities cold;

local cold sweats; small quick pulsation; panting and intermittent breathing; hiccoughing, &c.; death ensues generally in consequence of paralysis of the complexus of nerves round the stomach, or mortification, &c.

Instead of giving a general description of the hydriatric treatment of this really dreadful disease, I translate the reports of two high standing water-cure physicians. We shall see that errors may easily be committed even by very experienced and sensible men, and that the water applications have to be weighed with the greatest care.

Dr. Parrow, director of the water-healing institute in Berlin, Prussia, narrates the following case of typhus abdominalis.

A gentleman, living thirty miles from Berlin, and a member of the society of friends of the hydriatric system in Berlin, of a good constitution, thirty-seven years of age, had suffered some years from piles, used at home for about two months a light cold-water treatment, when he, on the 22nd of June, 1843, in the afternoon, after a sitz-bath, was suddenly attacked by an unusually vehement chill. This chill recurred next day after the sitz-bath. The causes of this extraordinary and vehement attack, the gentleman ascribed to a very vexatious occurrence he had some days before. On the 24th of June, he rode to Berlin on business matters; but he suffered so much on the road from pains in the neck, and heaviness in the back of the head, that on his arrival in the city, he at once went to the water-cure house, there to be treated.

He was immediately packed four times in the wet sheet, each time for a quarter of an hour, and remained in the fourth enveloping some hours to perspire, and was after that put into a tepid bath. After a very restless night on the 25th of June, the fourth day of the disease, the following symptoms appeared:

Fourth day. Pressure and heaviness in the head; look, like that of a drunken man; pain in the neck, worse from pressure, on the first four vertebræ; with a feeling of chilliness from the neck down through the body; pulsation ninety-six, soft and full; skin moist; tongue broad, moist, whitish-covered; acid and mouldy smell of the mouth; abdomen soft and painless; no noise of gas in the intestines by pressure; stool the day before. On examination of the abdomen, a swelling of the form of an egg was found in the right iliac region, which was formed by the right testicle having remained in the cavity. This was always very tender and protected by a concave pelotte; on the left side a convex pelotte retained an old bubonocele. A cold compress was ordered for the neck, to be renewed every half hour; and a warming one on the abdomen, to be changed every two hours. The condition remaining the same, the patient was packed in a wet sheet to sweat, and then put in a tepid bath.

Fifth day. The patient was not better, but rather worse, particularly the heaviness and heat in the back of the head. The lips were dry. In the left iliac region noise of gas by pressure. In the right iliac region the tender testicle did not permit an examination. The patient went at 7 o'clock to the

tepid bath without staggering; here he had eight buckets-full of water poured over his neck. This did not diminish the heat in his head. To it were applied cold compresses, changed every ten minutes, and deriving warming bandages on the feet and abdomen had no more effect. The head only got freer about 3 o'clock, P. M. In consequence of some cold injections a copious evacuation of pappy fæces had taken place. The heaviness of the head being so obstinate, a tepid half-bath of longer duration was ordered towards evening. The patient was rubbed by two attendants in the half-bath, six inches deep and of 60° F., for one hour and three-quarters on the lower extremities. During this time, when the water got warmer, some of it was taken out and fresh poured into it. Every three minutes a fresh cold bandage was put round the whole head and four glasses of fresh water drank by the patient. Thus, every pain and pressure in the head had disappeared, even when the patient shook it. He trembled from cold; pulsation was smaller, but as frequent as before, ninety-six per minute. One hour and a half afterwards it fell to eighty-four. At 10 o'clock another evacuation took place. No sleep. At half past one o'clock, P. M., the feet got warm.

Sixth day. The heaviness in the head had returned; pulsation again ninety-six, and nearly all the other symptoms observed on the previous day had reappeared. I, therefore, tried to break the disease by frequently repeated packings. The patient was, during the day, sixteen times enveloped in wet sheets, lying all the time with the back of his head on a

bladder, filled with ice. Eight o'clock, P. M., pulsation ninety. In the last sheet the patient remained from 8 o'clock, P. M., till half past 10 o'clock, P. M., without sweating much; he was then bathed in tepid water. Little sleep.

Seventh day. (From the seventh till the eleventh day the patient was daily, in the morning from 4 to 8 o'clock, six to eight times packed in wet sheets and then put in a tepid bath.) Condition unchanged. Patient drank on the seventh day, every three minutes, a small tumbler of water, which produced, after three quarters of an hour, vomiting of slime and water. He slept then, and ate for dinner a plate full of gruel. Nothing was then done, only the ice-bladder put as a head-pillow. In the afternoon a chill appeared, and after that the heat got considerably augmented. At 4 o'clock, P. M., face glowing, pulsation one hundred and twenty. Every three minutes a cold bandage to the forehead. At 8 o'clock, P. M., a half-bath of 56° F. for ten minutes, with washing of face and neck with a large sponge. Immediately afterwards an injection, which, after 9 o'clock, produced a large evacuation and great alleviation for the patient. Little sleep.

Eighth day. Condition unchanged; pulsation again ninety-six. The pain in the vertebræ of the neck by pressure seemed to have disappeared. White matter in the corners of the eyes, which proved the habitual difficulties from piles. Towards evening the fever augmented. A cold sitz-bath of one hour did not produce more rest in the following night.

Ninth day. The vertebræ of the neck are again

very painful to the touch; in the mucous membranes of the mouth and throat new symptoms made their appearance; the white covering of the tongue reaches the gum, and is there surrounded by red-blue rims. Pain in swallowing. Putrid smell of the mouth. No pain in the abdomen. The patient drank again water to cause vomiting, which it effected after one and a half hours. Warming bandage on the neck. In the evening, after repeated packings, he was bathed in tepid water at 9 o'clock, and had at 10 o'clock, P. M., a thin evacuation. Night again sleepless. Great heat in the head in spite of the constantly renewed cold compresses on it.

Tenth day. The patient took again water for vomiting, which was effected after two hours. At 2 o'clock, P. M., an evacuation; the excrement a dark yellow, and as if cut in small pieces, of clayey consistence, without blood, very badly smelling. No pain in the abdomen. At 4 o'clock another evacuation, of which the water of the injection was only mixed with a few particles of excrements. From 4 to 5 o'clock, P. M., repeated packings, during which the head felt cool, but the face burned with a dark redness. At 8 o'clock, bath, as above. No sleep; great restlessness.

Eleventh day. Half past six in the morning: although the patient is already eight times packed and and once bathed, he complains much about a feeling of great anguish and intense heat in the interior, though the skin is contracted to goose-flesh. Evacuation once, like that of the previous day; abdomen painless. On breast, hypochondria, and abdomen, some petechiæ, (spots or specks resembling a flea-

bite.) Pulsation one hundred and fourteen, smaller than the last day's. Treatment: every half hour a fresh compress on the abdomen and an injection. Every five minutes half of a small tumbler of drink. The first injection, which was given at ten minutes before 7 o'clock, brought off at 7 o'clock some excrements. At 8 o'clock, when the third compress was applied, a great remission took place, anxiety disappeared; skin warm; inclined to moisture; breathing quiet; eyes closed. Although the prescribed treatment was strictly followed up, the pulsation augmented at 12 o'clock up to one hundred and fourteen, and at 5 P. M., to one hundred and twenty. The injections passed off without any excrement. At 10 o'clock, P. M., a half-bath of 58° F, for fifteen minutes. When, towards the end of this bath, some wind passed off, the patient felt the heat in the face to decrease; his feet, however, did not become warm until 5 o'clock, A. M., notwithstanding constant rubbing. The treatment was continued during the night.

Twelfth day. The patient gets sleepy, but retains his full senses. Skin like the day before at 8 o'clock, A. M. Pulsation one hundred and twenty; soft. The pain in swallowing ceases. A great deal of tough slime is blown out of the nose. More hawked out. The tongue is clean and shows a healthy appearance; being broad, moist, red, and whitish only in the middle of it.

The patient is left quiet during the forenoon, as he is occasionally sleepy.

Having eaten nothing for six days, he cats now a whole plate of gruel. In the afternoon the treatment

of the eleventh day is resumed. At 9 o'clock, P. M., pulsation one hundred and twenty-six. At night, from time to time some sleep.

Thirteenth day. The patient lies quiet, and speaks only when spoken to. The sensibility of the neck still exists. Pulsation one hundred and twenty-six; skin like that of the preceding two days; petechiæ on the hypochondria numerous and clearly visible. Lips dry, tongue good. The patient hawks out a great deal of stinking, tough and foamy slime.

The compresses on the body are continued, but injections set aside till 6 o'clock, P. M. In the fore-noon some hours sleep. For dinner he eat a plate of bread-soup. At 6 o'clock, P. M., pulsation one hundred and thirty-six. Heat and anxiety very great in the night, and delirious. At one and a half o'clock, A. M., a half-bath of 64° F. for three minutes, and a bucket of cold water poured over the neck. Quite a good sleep followed.

Fourteenth day. Symptoms like the day before. The treatment with compresses, injections and drinking continued. The stools contain some more excrements. Seven o'clock, P. M., pulsation one hundred and twenty. Pain in the head of the wind-pipe; warming bandage round the neck. At 8 o'clock, P. M., spontaneous breaking out of a general and copious sweat; the treatment, followed up till now, is at once set aside.

#### CRISIS AND CONVALESCENCE.

Fourteenth day—continuation. At 10 o'clock, P. M., the patient still complains, though lying in a profuse sweat, of an enormous heat in the interior. Pulsa-

tion one hundred and thirty. As the heat and frequency of pulsation augmented more and more, the patient was put into a half-bath of 55° F. for five minutes. Thus cooled off, he slept four hours.

Fifteenth day. At 7 o'clock, A. M., he was found again sweating. He was put into a half-bath of 65° F. at 9 o'clock, A. M., for two minutes; and at 10 o'clock, A. M., he slept very quietly, with fresh skin and ninety-six pulsations.

One of the furunculous tumors opened and made the patient suffer a great deal. Previously, on the sixth or seventh day, some red, burning eruption had broken out on the interior surface of the lower extremities. On their place appeared, afterwards, a flat tumor; that of the right leg was the smallest and ripened first, discharged to-day a dark gray, not very fætid, matter through different holes. The round openings proved that a tumor was formed out of a combination of furuncles. The tumor on the left calf was more than three inches long and one inch wide, and very painful. Bandages on both calves. The heat angmented towards evening very much, but the patient retained his consciousness. At 9 o'clock, P. M., a half-bath of 65° F. for eight minutes. Half an hour after that he fell quietly asleep, and slept five hours.

Sixteenth day. The patient sweating again in the morning. At 9 o'clock a half-bath of 65° F. for eight minutes. The upper tumor of the left leg open today, and some small pustules formed on the chest and shoulders. In the evening a repetition of the half-bath. At night little sleep, but no excitement.

Seventeenth day. In the morning a short half-bath. The patient feels very weak. He has become thinner and is hungry. For dinner a plate of gruel. At 4 o'clock, P. M., a general very strong sweat broke out, which lasted till midnight. At 6 o'clock the heat was the greatest, face dark-red, pulsation one hundred and forty-four. He drinks every eight minutes half a small tumbler of fresh water. Nine and a half, P. M., pulsation one hundred and thirty-two. Sleep from 1 to  $3\frac{1}{2}$ , A. M., then again sweat.

Eighteenth day. Six, A. M., pulsation one hundred and four. A great deal of tough slime is continually hawked out. The tumor on the interior surface of the left calf discharges much stinking matter, mixed with blood. The wound of the lower lip, which the patient bit, gets an impure green ground; the tongue is again covered with a white slime. After the patient had been put in another bed, the fever developed itself more violently. The pulsation augmented to one hundred and thirty. At 10 o'clock, A. M., the patient was, therefore, packed four times in a wet sheet every ten, twenty and thirty minutes. In the fourth sheet he remained. At 12 o'clock sweat broke out, which poured out very copiously for seven hours, with the same excitement as the day before. At 7 P. M., the patient was put into a half bath of 65° F.. with one hundred and thirty pulsations a minute. In this bath he remained ten minutes, and felt very comfortable. After the bath, pulsation one hundred and sixteen. Supper, gruel and apple-jelly. He falls asleep. At 10 P. M., ninety-six pulsations. He sleeps till midnight, and afterwards at intervals.

Nineteenth day. Pulsation one hundred and eight. For breakfast, a glass of milk. The patient wants a bath, but it is refused, because the skin shows inclination to sweat, which ensues at 101, A. M., and flows till 61, P. M., without interruption. When the patient was at this time put in the bath, he had one hundred and thirty-two pulsations. (The bath was 58° F. and lasted fifteen minutes.) After he had been dried off and brought into the re-made bed, his pulsations were eighty-eight at 7 o'clock, P. M. During this day the tumors on the calves discharged a great deal of matter and pus. Even the pustules on the chest contained pus. An evacuation of yellow-brown excrements, mixed with some flocks. The left iliac region was now painful to the touch, and gave, by pressure, the noise of gas. After the bath the patient eat for supper a plate of sago boiled in milk. At 91, P. M., he slept quietly. Pulsation as at 7 o'clock, P. M. The night like the preceding one.

Twentieth day. Six o'clock, A. M., the patient has sweated some; pulse one hundred and ten; half-bath of 65° F. for fifteen minutes; then sleep till 1 o'clock. Pain continues in the left iliac region; strong appetite. The pulsation augmented at  $8\frac{1}{2}$  o'clock, P. M., to one hundred and twenty. The heat was only moderate, sweat in the face. Half-bath of 65° F. for five minutes. Uninterrupted sleep all night.

Twenty-first day. Six o'clock, A. M., pulse one hundred and eight. The patient feels quite well and easy; wishes a bath; is refused on account of the approaching sweat. He sweats from 10, A. M. to 9 o'clock, P. M. Pulse one hundred and thirty. Bath

of 65° F. for ten minutes. Pulse one hundred. Night like the preceding. The patient's convalescence was retarded through the fourth and fifth week. The cause of this retardation seemed to be the condition of his leg, the tumor of which had opened on the eighteenth day, making a local treatment necessary through the fourth and fifth week. The skin, which was loosened by the ulceration, was thrown gangrenously off with vehement inflammatory pains of the neighborhood. On its place there appeared, on the twenty-second day, an impure ulcer of the length of two inches and the breadth of one inch, in the basis of which, on the twenty-eighth day the first good granulation showed itself. On the right leg the rims of two openings became also gangrenous. The wound of the lip, mentioned on the eighteenth day, which was continually covered with compresses, got purified on the twenty-fourth day, and then diminished rapidly. A decubitus on the lower part of the back healed soon, after the patient had been put on a mattress with a hole in that region. A furuncle, which made its appearance afterwards, of the size of a hickory-nut, on the left back, and some others on the legs, did not incommode much. Of the course of the principal disease, the following remains to be mentioned:

Some more sweats on the twenty-fifth day, and in the night of the twenty-fifth to the twenty-sixth day, took place. On the twenty-fifth day the left iliac region was yet painful. Afterwards the whole body got-painful to the touch. On the twentieth day, a very copious normal evacuation took place, which has since that time, every second or third day, been repeated. The principal complaint of the patient during the fourth and fifth week, was of hunger. He got regularly for breakfast and supper, a glass of milk with crackers and the yolk of an egg; for dinner, one or two plates of sago-soup, with raspberry juice. This diet was from day to day made more substantial. On the forty-fifth day the patient was, for the first time, let into the garden, and at the end of the third month he returned home. He visited the institution six weeks afterwards with blooming cheeks, and far stronger than before he was taken sick.

The careful reader of the communicated case will see, that the disease exacerbated from the afternoon of the seventh, and then again from the eleventh day; and that the skin-crisis, which began on the evening of the fourteenth day, repeated itself on the seventeenth, eighteenth, nineteenth and twenty-first, in a most beautiful manner.

By this cause the disease characterizes itself as typhus. The particular heaviness of the head during the first fourteen days, the appearance of the catarrhal affection of the mouth and throat in the second week; the clearing of the tongue on the eleventh day; the appearance of the petechiæ from the eleventh to the fourteenth day; the immoderate hunger at the approach of convalescence, are symptoms which must be regarded as belonging to the perfect picture of typhus. Of the most usual symptom, the typhous diarrhæa, we find in our case scarcely a vestige or sign. This is not a reason why we should conclude that no ulceration of the mucous membrane of the intestines

should have existed; but they let us presume, that they were confined to a small portion of the small intestines.

There are two observations which may be derived from the above case, and which we mention, because they appear for hydriatric treatment of typhus of the greatest moment.

1. The most energetic means were of no avail to prevent the development of the disease, or even to control its course.

So powerful an extraction of warmth as that which was effected by the rubbing-bath of the fifth day, passed off traceless. It did not hurt, nor did it do any good; on the following morning every thing was as before.

The sixteen times repeated enveloping on the sixth day, effected no more. The moisture of the skin was, after the last packing, so little, that it is doubtful whether it was the consequence of the wet sheets or of the secretion.

The want of success in both these experiments may find its reason in this, that the applied remedies are antiphlogistic, whilst the typhus does not belong to the class of the pure inflammations, but is a disease of particular nature.

The vomitive of the seventh day was clearly too late in being applied; the vomitives of the ninth and tenth day were given against the condition of the mucous membranes of the mouth and throat. Weiss, in his Hand-book of the Water-cure, correctly observes:

"Thus (viz: if gastric impurities are removed by vomiting) will it sometimes be possible to prevent the

fever. If the disease, notwithstanding this, makes progress, its course cannot be stopped by the most energetic and best applied water-treatment. It then passes through all the stages in succession, and we must be content, to mitigate the fever, with its diarrhæas and congestions, by the interior and exterior use of the water, and thus procure the desired aim."

The best remedies for mitigating the heat and the congestions to the head, appears to be a regular application of the compresses to the abdomen, injections, and drinking water, like the treatment which was applied from the eleventh to the fourteenth day, only with the difference, that the injections ought to be given seldomer. The patient will, in general, readily drink water every five minutes. It is natural that he then should urinate a good deal, which is not a consequence of the disease. If we consider how much warmth is extracted from the body, to elevate so much water of about 50° F. to the temperature of the blood, we must see that this methodical drinking is not an insignificant and trifling remedy. Yet we do not contend that the short remission which ensued at 8 o'clock, A. M., of the eleventh day, was solely the consequence of the treatment, ordered shortly before; it is probable that it might have taken place without it. But that the favourable condition of the tongue and skin, which during the whole time did not become parched, ought to be ascribed to the free use of the water, may be contended with certainty. The most apparent alleviation in the above narrated case. that of a hæmorrhoidarius (a man who suffers from piles,) was clearly effected, when, in consequence of

injections, evacuations of wind and excrements took place, as on the fifth, seventh, and on the evening of the thirteenth day.

The great spinal irritation of the neck, which was observed from the beginning of the disease till the fourteenth day, is peculiarly remarkable.

2. In the stage of the skin crisis, the cooling baths did excellent service.

When the critical sweat, after a duration of some hours, began to decrease, (in consequence of the inability of the body to do more for the time,) the patient was washed off, according to circumstances, in a bath of 54° to 60° F. from five to fifteen minutes. Face and neck were at the same time washed with a large sponge, and some water of the same temperature as the bath poured on the neck, not on the head.

"For the duration of these baths we may give this rule, that the patient must remain in it as long as he feels comfortable, or what is the same thing, till he is perfectly cooled off, but not the least more." \* \* \*

The effect of these baths is clear; they take the disagreeable heat out of the body, quiet the whole system, and thus produce an easy sleep; they at the same time cleanse the skin, and invigorate and strengthen it for the next crisis.

The most perfect remission we find on the nineteenth day. The difference of the effect of the baths, according to the stage of the disease, appears here very clearly, if we compare this observation with that of the evening of the fifth day. In the first stage a derivative bath of 58° F., and of one and threequarters of an hour duration, did not at all reduce the pulse. An hour and a half after the bath it was only diminished twelve pulsations. In the stage of crisis, the pulse was reduced in the course of three-quarters of an hour, with the help of a bath of the same temperature and of fifteen minutes duration, forty-four pulsations; and this remission was not momentary only, but continued for some hours.

What is the cause of this difference in the effect?

The physician acted in the first case against the nature of the disease, (like a drug-practitioner with medicine,) and he could not produce the desired effect. In the second case, he supported nature in her healing efforts, and his treatment was, of course, crowned with complete success. We may boldly contend, that there is no remedy in the world which could be compared in this respect with the water, for even, to some extent, wrongly applied, it did no real harm; and rightly used, produced the most splendid effect.

The skin-crisis seems in our case the only real crisis, for the furuncles on the legs ought to have developed themselves much quicker to be considered critical. They were probably only the consequences of the hard rubbing of the legs in the half-bath of the fifth day. The ulceration of the tumor on the left leg seems also to have been the cause of the renewed coating of the tongue on the eighteenth day. In general we may say, that these furuncles, and the consequent ulcerations, have only retarded the convalescence.

No. 2. Dr. De Meyer relates the treatment of six

children in the same house, who were sick of Typhus Abdominalis, in the following manner:

On the 6th of March, 1846, at 6 o'clock, P. M., I was called to a house in Brochen by a despairing mother. She told me that her husband was a poor tailor, that six of her seven children and her husband were very sick, that one of her sons had already died five days ago, and that their attendant physician had left them three days since. When I entered her house, I was involuntarily startled by the horrible aspect before my eyes, every one of the sufferers seemed worse than the other, the panting of the one, and the dying rattling of the other produced a terrible picture, which was sharpened by the apparent extreme of poverty and entire want of comfort in the house.

A, the father, forty-two years old, of tall but weak frame, had been sick fifteen days; he was the only one who could give any answer, though in a weak and harsh voice. His eye was dim and languid, his face and whole body ash-colour, and like that of the other patients, so fallen away that, when they closed their eyes, they appeared like mummies. Lips and tongue were dry; breath hot, short and interrupted by frequent dry coughing; the abdomen swollen and painful to the touch; skin dry; the temperature in the armpit 96° F.; pulsation 125 per minute; no evacuation whatever for some days; urine very little and brownish.

B, C, D. The symptoms of the two older brothers, one eighteen and the other fourteen years of age, and of the youngest sister nine years old, were nearly

alike, only the younger brother was farther gone. They had been suffering for twenty or twenty-two days.

The eyes were splendent, look weak, face red, lips and tongue dry, full of rents, and like the teeth covered with a dry brown crust; they moved constantly their tongue out of the mouth, which was accompanied by an unintelligible muttering, and by a constant playing and tearing on the bed clothes.

The swallowing was very difficult, and interrupted by a tendency to cough, which had a particularly hollow sound; the breath was short, somewhat rattling, hot and badly smelling; the abdomen was much swollen and painful, the patients involuntarily moved the muscles of their face on the touch; the skin was dry and burning hot; on the abdomen and lower extremities, there appeared spots of the size of flea bites, (petechiæ.)

The two brothers had some boils on the back of the head and neck, of the size of half a pigeon's egg; the temperature of the body was 100° to 104° F., and the pulsation 165° to 182° per minute; stool for three days colliquative; they urinated little, and dark red with a speckled deposite.

E. Another daughter, sixteen years old, already three times regularly menstruated, was a blue eyed girl of a tender white skin, and eleven days sick; her head was much oppressed; eyes red; the cheeks fiery red; the lips of a brownish colour; the tongue thickly covered, and like the lips dry; she complained of insufferable thirst, difficult swallowing, and burning in the throat; the hearing was, since the time she

had been repeatedly delirious, diminished; she played often with her hands in the air, and rose sometimes suddenly with a scream, and kicked about.

This condition was only interrupted by a few free moments. The breath was very hot and quick, the abdomen drawn in, and in the region of the uterus painful to the touch. The skin was dry, and on the whole surface, principally on the breast and lower extremities there appeared a small blister-like cruption, of the size of millet-seeds, without any sign of surrounding inflammation. The temperature of the body was above 100° F., pulsation 165 per minute, stool daily three or four times watery; she urinated very little, and this with great burning in the urethra, which was generally accompanied by an emission of slimy matter from the vagina.

F. Another son, eleven years old, and thirteen days sick, had a ghastly look, the muscles of his face were painfully distorted, the eye deep and broken. He was a mere skeleton and motionless, till one would move any part of his body, when he sereamed aloud. His breathing was short and hardly visible; lips dry, contracted, black, bursted open, and teeth covered with a crust. The abdomen was puffed out and very painful. The temperature of the armpit showed a heat of 103° F., and that of the knee hollow only 76° F. The pulsation was small intermittent, and only 72 per minute. On the breast, back and lower extremities, were eighteen carbunele-like ulcers of the size of a quarter of a dollar, which pained the sufferer much. He frequently evacuated urine and excrements involuntarily; excrements watery of the smell of carrion; an ice cold sweat upon him from the knees downward.

### TREATMENT IN GENERAL.

A. was repeatedly packed in single, and C. in double wet sheets. Water was alternately poured over B. C. D., and they were put in half bath and rubbed; this was done till a free sweat was produced; after that they were washed off, and water again poured over them out of a watering pan; they then were put to bed, well covered, and in this condition left till the first symptoms reappeared, viz., torpor and delirium. This procedure was continued (in the beginning from ten to twenty minutes, afterwards two liours resting,) till a perfect remission of all the symtoms appeared. Besides this the patients A. B. C. and D., had bandages put to the neck, and F., to the head and abdomen, (this latter with ice,) and ice cold injections were given. As long as they could not swallow, and the lips and tongue were covered, dry and cracked, I gave them pieces of ice of the size of a small pea every five to ten minutes. When they began to be able to swallow, I gave them cold water to drink as much as they wanted. The water I applied, was pure spring water, at about 45° F.

The success with the first five cases was surprising to every one; on the third and fifth day, there appeared sufficient crisis by sweating; after this a pustulous eruption, like Varicellae Acuminatae, formed itself with B. and E.; a great number of small carbuncles with C. and D., in seven days, of which latter, E., received a small share on both legs during

the recovery; these carbuncles healed in fourteen days.

The perfect restoration of health, with the exception of some ulcers, was accomplished with A. on the ninth day; with D. on the twelfth; with B. on the sixteenth; with C. on the twenty-fourth, and with E. on the forty-second day. With this latter patient there appeared, after the typhus had been perfectly cured on the seventh day, a continuous flowing from the vagina, a perfect chlorosis, which was conquered by a daily washing with cold water, and three daily sitz-baths, of ten minutes each, within thirty-five days. Since this time they have all enjoyed perfect health, and given a striking proof of the truth of the hydriatric system.

I have to this one disease devoted more time and space, because I consider it the least understood, the most difficult to treat, the most apt to be over treated, and the most fatal of all primary diseases, if primary it may be called.

## XXIV.—CRAMPS OF CHILDREN, (Eclampsia, or Epilepsia Acuta.)

Eclampsia signifies convulsive spasms, generally from whatever cause they may originate. But we understand by it the Epilepsia acuta and imperfecta of children up to their seventh year, when the disease, if not cured, is frequently transformed into a perfect epilepsy. There are generally some symptoms preceding the attack, such as quick change of the colour, distortion of the muscles of the face, smil-

ing, distortion of the eyes, or half open eyes in sleep. The infant usually bites much and hard on the nipples of the nurse, chokes when he drinks, and suffers from irregularities of the bowels, constipation, or diarrhea, with green, chopped excrements. The attack itself is very similar to epilepsy, shows itself by unconsciousness; tonic and clonic cramps; contortion of the joints; red, bluish face; and in some cases by excessive pallor and tetanic cramps. The attacks last generally only a few minutes; sometimes from a half to six hours, but occasionally they continue for days. We may say that out of every ten who suffer, in after life, from epilepsy, seven were afflicted in their infancy by eclampsy. The disease is generally seated in the intestines, and the attacks are frequently attributed to a sudden taking of cold. The disease, however, is often produced by bad milk, or in consequence of wrong diet of the nurse, menstruation, fits of anger or other disturbance of the nurse's mind. In regard to the treatment, we have to take into consideration the causes, and to remove them. The child itself is to be treated by washing, bathing, pouring water over it, packing of the whole body and of the abdomen in particular, followed by rubbing and frequent injections. The temperature of the water to be used, depends on the strength and irritability of the child.

The application of this treatment is to be accommodated to the symptoms, and depends upon whether the cramps (which generally show themselves by a drawing in the muscles of the face, and in the extremities, or by tearing in the abdomen,) are of long du-

ration, quick in succession, or of great intensity. In slight attacks, washings and baths twice a day are sufficient. But if the cramps last long and are often repeated, we must resort to two or three envelopings in wet sheets, and after that pour water over the patient.

If the disease originates in worms, or in the teething of the child, we have then to apply the means which are recommended under those heads.

In very severe cases, I always succeed in subduing the attacks, by putting the afflicted child at once into a half-bath of 68° to 72° F., in which it is rubbed from eight to fifteen minutes, whilst from time to time a glass full of water of about 60° F., is poured over the patient. I then pack the child loosely into some linen cloths, thickly covered. Here I leave the child till it gets right warm or sweats; then I have it washed with water of 68° F., a bandage put on the stomach, and every two hours an injection of 70° F., applied till a free stool is gained.

A case, reported by Dr. Weiskopf, may find a a place here:

A little girl, of five years and a half, was after a late and somewhat indigestible supper, attacked at 10 P. M., of the 24th January, 1842. The father tried for three hours every means generally recommended, but without success.

Dr. Weiskopf was then called, and was told that the cramps had lasted already three hours without intermission. The girl had a pale bluish face, horribly distorted by convulsions, foam on the mouth, and locked jaws. The extremities were cold, in constant crampy motion, the pulse contracted.

Dr. W. had the child immediately undressed, put on a straw cushion, and the whole body rubbed by two men with hands dipped in cold water, whilst he himself sprinkled water from time to time in the face, and pit of the stomach. After such a manipulation of two hours, the cramp of the jaws ceased first, and then, after a vehement chill, the convulsions. The consciousness of the chill did not return, till the Dr. was able to administer some water by the mouth, when a violent vomiting of indigested food took place. The patient was then well dried and put to bed, slept quietly, sweated somewhat, and after another washing the next morning, was entirely restored, with the exception of a slight debility.

## XXV.-WHOOPING COUGH, (Tussis Convulsiva, &c.)

Cough, a very vehement exhalation with a peculiar sound with which all are familiar, when the air is violently driven out of the glottis. The whooping cough appears always epidemically, and among children rather than grown people, whom it seldom attacks unless there are children in the family suffering already from it.

1st. Catarrhal Stage. Symptoms of the disease may be observed from three to eight days before it is completely formed, such as catarrhal difficulties, hoarseness, cough, &c., yet often so insignificant that they are overlooked. These symptoms get worse, the catarrh affects the nose, throat, head of wind-

pipe and lungs; and in the evening there appears fever with heat, thirst and quick pulse, which remits in the morning under sweating, and often forms intermittent fever. Loss of appetite, serous inflammation of the tonsils, and a highly characteristic cough, which is clear, sharp, or deep, without expectoration; which is singular, because there are first some small expectorations with a clear sound, followed by a deep and howling inspiration, and a short suspension of all breathing, in which the face becomes red and blue. As soon as these feverish attacks cease, the second stage ensues.

2nd. Convulsive Stage: this stage lasts from two to fourteen weeks, varying according to treatment, the character of the epidemic, the individual constitution, the season, the climate and the weather. There is the same characteristic cough from six to twelve times a day; the child feels the approach of the spell, and runs to the mother or to the wall to have some support for the head. The violence of the cough produces often a strong pulsation of the carotids, swelling of the jugular veins, of the eye-lids, reddened eyes, cold sweats in the face, bleeding of the nose, involuntary evacuations of urine and excrements, fainting, delirium, cramps, &c. An attack lasts from a half to five minutes. Diarrhœa is good in this stage. The expectorated phlegm is in the beginning thin, watery, later tough, whitish, at last globular, pus-like, (sputum coctum.) We cannot perceive through the stethescope, during the coughing spell, any noise of respiration, not even in the first bronchia. The air finds, during the attack, an impediment in passing the bifurcation of the bronchia. After the attack is over, the breathing gets again free, the pulse subsides, the face becomes natural; tender children weep a few minutes, older ones complain of pain in the chest. During the intermission they seem to be well, have good appetite, even voracious, particularly if the attack was followed by vomiting. They return to their play. The sleep is restless, the breathing often somewhat rattling; we see a high degree of bodily and mental irritability, fretfulness and willfulness. Every thing which irritates, excites an attack often suddenly, such as cold air, vehement crying, running, laughing, sneezing, &c. Some children suffer more than others; they soon get weak, waste away, the pulse becomes small, quick; urine thick, clear, with occasional constipation. If this stage of the disease lasts some weeks, they fall away, get pale, puffed up, a suffering physiognomy, slow fever, sometimes colliquations, and death.

3rd. Decreasing Stage. The cough loses its particular whistling and hollow sound, gets rattling, the expirations are not so frequent and short; it appears more like catarrh, is seldomer during the day, at last only at night, or when the child takes cold, gets irritated or excited; we observe less congestions, the expectoration is easier, and the quantity of the now round, yellowish phlegm is larger. The strength increases; the exterior looks better and brighter; stools more regular; urine thicker, red, critical; and worms pass off.

Priessnitz gave the following short advice as an

outline of the treatment.

Let the child perspire a little in the wet sheet, particularly, if the disease is accompanied by fever. Put on the chest wet bandages, and renew them, when they get dry. It is necessary to let the children breathe fresh air; do not confine them in hot rooms. Give them a good deal of not quite cold water to drink.

My own experience has taught me that the whooping cough, in the first stage, can always be cured in a few days by enveloping the child in the morning in a wet sheet, till it gets moist. After that it is to be rubbed off with a cold wet sheet. This rubbing is to be repeated twice during the day, and followed by pouring some water over the child out of a pot or watering-pan. At the same time I put on a wet, well wrung out bandage, covering the neck, chest, back and stomach, and renew it every half an hour. In the second stage, I pack the child twice or three times in a wet sheet, according to the duration and violence of the disease, in which it remains from one to one hour and a half; after that it is to be washed off. If there is a great tendency to vomiting, we pour about three quarts of water in six to eight short intervals suddenly over its head, chest and neck; the bandages on the chest and neck renewed every hour, and that on the neck every fifteen minutes.

The effect of this treatment is wonderful, for with the first pouring of water over the child, after the first sweat, the disease is broken, and diminishes visibly with every following application.

I have always given cold fresh water to drink, and never saw any bad effects from it.

In every case I have had under treatment, I found that after the successful application of cold water an exanthem, not unlike the measles, made its appearance on the body of the patient. I therefore am of the opinion with Dr. Bicking, that the whooping cough is caused by an exanthematic contagium, which originally is fixed in the mucous membrane of the trachea, spreading thence along the course of the ramus recurrens and phrenicus of the nervus vagus. This opinion is confirmed, when we dissect the body of an individual which had died of this disease. We then find in the mueous membranes, as far as the disease reaches, the same eruption or an inflammatory redness. This exanthem was overlooked on account of its smallness; it can only be detected by a very careful examination. But it gives us the reason why no drug-treatment can produce more than a palliative help. Drugs eannot remove the cause of the disease, though they may deaden, momentarily, the susceptibility of the body to local excitement.

In the drug-treatment, the disease either kills or is prolonged till it has made its whole course through; whilst the water-treatment, developing the exanthem on the surface, and removing the interior excitement, breaks it off at once. Thus in the water-treatment, there never will be a lasting injury done to the lining of the respiratory organs, while the drug-treatment, (struggling only against the symptom, and subduing, instead of encouraging the body in its tendency to throw exanthematic disease to the exterior surface,) keeps the exanthem in the mueous membranes, and

thus plants the seat of future destruction in this life-important organ.

The great Autenrieth has made the assertion that the whooping cough is only a modification of measles. But that this, as far as the similarity of the whole disease is concerned, is a mistake is clear, because the measles, and all diseases similar to it, attack the individual only once, the whooping cough therefore, as a modification or hidden specimen of the measles, should have the same character, which is not the case, as every one knows. The measles on the contrary rather augment the disposition to whooping cough, at least as far as we know out of drug-experience. And another reason is this, that croup, not whooping cough, appears when the measles, as is frequently the case, reach the mucous membranes of the organs of respiration.

That this whooping cough exanthem is called forth to the surface from the mucous membranes, only in consequence of the judicious application of water, is proved by the fact, that the strongest skin irritating remedies of the drug-school, do not produce the least desired effect.

# XXVI.—INVOLUNTARY LIMPING OF CHILDREN IN THE HIP-JOINT: (Claudicatio Spontanea.)

This diseased condition is often, particularly in the first stage overlooked, and consequently the children attacked by it, become frequently cripples. It manifests itself in three stages:

Either in consequence of innate disposition, viz.,

rickets, scrofula, gout, mercurial diseases, &c., or as metastasis of other diseases, such as itch, &c., or of a cut, fall or blow, a slowly or quickly progressing inflammation in one or the other pan of the hip-joint appears in the following form:

1. Stage of inflammation: In the beginning, the patient feels a numbness in the upper thigh, followed by weakness of the foot, and stiffness in the morning. which disappears during the day. He begins next to complain of pains in the hip-joint, which increase and usually are the strongest in the evening; they move about in the thigh, assume a rheumatic character, and are connected with fever. These attacks may sometimes last for years, without your being enabled to detect with the eye, or the hand any disease in the hip-joint; there is constant change from worse to better, and from better to worse; the foot is generally turned outward, and the walk dragging. But often, when the inflammation ensues quickly, the pains become vehement, a marked swelling appears behind the great trochanter, and the patient is soon unable to move the foot.

The treatment is simply this:

We wash the whole body twice, and the leg four times daily with cold spring water from three to five minutes; we put compresses over the whole hip-joint, which must be renewed as often as they get warm; the diet ought to be simple and nourishing, and the patient must keep quiet. This is sufficient to remove in a short time the local affection. When this is done, we have to direct our attention to the existing cause, for which a general treatment is then to be

prescribed. This general treatment must be combined with the local treatment, if the patient is already in the second or third stage of the disease. If the inflammation is so violent, that it cannot be suppressed in the above described manner, we put small pieces of ice into a large bladder, on the suffering spot, and renew it, when the ice has melted. If there is general inflammatory suffering connected with the local disease, we envelop the patient from two to six times during twenty-four hours in a wet sheet, till the inflammation has disappeared.

2. The second stage is that of exudation: If the inflammation, in consequence of neglect or wrong treatment, has made progress, and already passed over into exudation, a thick matter is formed in the pan of the joint, weakening the round ligament of the joint, with which the upper thigh is fastened into the capsule; this matter pushes the head of the upper thigh out, and produces thus a prolongation of the sick extremity. The diseased hip is now flatter than the other, the hollow is deeper, the muscles of the sick appear thick, get more lax, the whole leg wastes away, and the great trochanter stands more out and downward. The pain is now very vehement, when in consequence of any motion, the head of the joint is pressed against the socket; the patient halts more and more, the whole trochanter opens in one or more places, empties a mass of bad humor, which gets thinner and more malignant every day, and often throws out bony substances. The openings from fistulas heal badly, and are attended with general, wasting, clammy sweats in the morning; the leg falls away or swells ædematously, while the pains are diminishing.

The treatment requires the attendance of a physician; the patient is always to be packed in a wet sheet, and ought not to sweat. The bath after this packing must be a half-bath of two to five minutes, reaching up to the hip; the other parts of the body must be rubbed off with a dripping wet sheet; the openings are to be cleansed by repeatedly injecting water into them, and by putting fourfold wet compresses over them, which are renewed when they begin to get dry.

## XXVII.—COLIC, (Colica.)

Thus we call a cramp of the intestines. It appears in cutting, pinching, contracting, remittent, generally vague, sometimes fixed pains. It is without fever, and often only the symptoms of other diseases.

It may be an inflammatory constipation; a bilious colic, in consequence of undigested victuals in the first canals; a pituitous colic, in consequence of accumulation of slime; stercoral colic, in consequence of accumulated excrements; uterine colic, in consequence of difficulties in the uterine system; gonor-rhoic colic; colic in consequence of mechanical obstructions; saturnine colic, in consequence of lead poisoning; worm colic; metastic colic, in consequence of another retarded disease; flatulent colic, in consequence of accumulated gas in the intestines; intussusception colic, in consequence of a part of one intestine being obtruded into another.

1. Inflammatory Colic shows itself by vehemently

stinging and cutting pains in the bowels above or below the navel, which are augmented by pressure; the skin is hot, and thirst great.

We give cold washings every two hours; envelop the body in a wet sheet; put bandages, not too thick, on the abdomen, which we renew every ten to fifteen minutes, and let a good quantity of water be drank. The cure is perfected in a few hours; after which we give one or two injections of water of 70° F.

- 2. The Colic in consequence of constipation and the bilious colic are very much alike, both are connected with constipation, which, in the second kind, passes frequently over into diarrhæa. The symptoms are generally known.
- 3. The Pituitous Colic originates always in an accumulation of slime and worms in the intestines. The abdomen is full, extended, sometimes soft; we feel clearly the obstructions. The stool is generally diarrhœa-like and mixed with slime.
- 4. The Worm colic. The pain is the consequence of the motions of the worms which irritates the bowels; this pain appears and disappears quickly, particularly in the region of the navel, mostly during the night. It is accompanied by all the other symptoms of a worm-disease.
- 5. The Flatulent Colic is produced by a development of gas in the stomach and intestines. The cause is generally a weakness of the intestines. The gas which is here produced, is principally carbonic acid and hydrogen. The abdomen is much puffed up, we perceive frequently a great rumbling, and the belly sounds hollow, like a drum. The pains appear and

disappear quickly, and ascend generally from below, upwards, to the stomach, even to the chest; in consequence of which, the child feels agony, oppression, difficulty in breathing, pains in the chest, ructus and inclination to vomit. There exists, generally, constipation at the same time, and the patient feels alleviated, if the gas finds it way out above or below. In this kind of colic, rubbing produces alleviation, while in the inflammatory colic, rubbing produces more pain.

6. The Painters' Colic appears mostly in children of potters, tin-founders, miners, dyers, &c., through the effect of lead, or drinks adulterated with lead.

The patient complains of violent pains in the lower part of the abdomen, which extend even to the joints; writhes, cries, and his hands and feet as well as his abdomen are often convulsively drawn in. This clenching is often so strong, that the fingers seem to be compressed in the fist; the feet drawn up towards the abdomen; the hands distorted and the abdomen flat, even contracted hollow. The patient feels extremely weak, nausea and inclination to vomiting. The vomited matter is a greenish, bitter fluid; the bowels are very much constipated.

7. Intussusception, or where one intestine is pushed into another. It is a very dangerous condition, which originates suddenly in consequence of an accident or of accumulation of worms. The lower part, generally, forms the sheath, but sometimes, in very bad cases, the upper.

This diseased condition, originating mostly after a quick motion, with a full stomach, shows itself in a

particularly disturbed, troubled countenance, in great anxiety; inclination to vomiting; vomiting of the contents of the stomach, viz: phlegm and gall, and even the contents of the upper intestines. The intestines are over-filled from above, down to a certain spot; connected with it is a continual, drawing pain, which is augmented by every motion. The intestines appear sausage-like.

The treatment of bilious, pituitous, constipation, flatulent and worm colic, is generally the same, the modifications which take place in single cases with the treatment, depend on the violence and duration of the colic.

There are three principal objects to be attained by the treatment:

- 1. To provoke a greater activity in the bowels.
- 2. To dissolve their contents which produce the colic; and,
  - 3. To remove them out of the bowels.

We attain the first by putting wet cataplasms to the abdomen, which we renew as often as they get warm; by tepid, sitz and half-baths of from three to thirty minutes, connected with constant rubbing of the lower extremities and of the abdomen. The second and third demands we obtain by giving the patient a greater quantity of water to drink, and every two to half an hour, alternately, half and whole tepid injections from 65° to 72° F. These means will certainly restore health.

In regard to Saturnine-colic and Intussusception, I refer to the following cases as reported by Dr. De Meyer:

Anna M. Stern, eleven years old, was for some days sickly, complained of gripes in the abdomen with drawing in of the extremities, and at night was suddenly attacked by the most vehement pains in the abdomen, with contractions of the extremities.

I found the patient with a troubled, pale, yellowish face, and dry tongue. She complained of tearing pains in the head; palpitation of the heart; constipation and violent burning when urinating. The skin was dry and wrinkled; the abdomen during the attack drawn in, and the members convulsively contracted.

I recognized the disease as a case of Colica saturnina; ordered much drinking of a mixture of half fresh milk and half cold water; an injection of the same mixture every hour; compresses on the abdomen to be renewed when they began to get dry, and every two hours an enveloping in a wet sheet. After the first packing the patient felt relieved; and after the third, began to sweat; after this sweat, I had four quarts of water poured over her, and her person well rubbed off. She was then put to bed and the same procedure gone through with, as soon as she had got warm.

Thus treated, on the third day the child was healthy and walking happily about.

Wilhelmina Kohl, a fair, blue-eyed, slender child of five years, of puffed up exterior, suffering a long time from worms, complained shortly after a quick jump of vehement pains in the right side below the navel. When, after all the prescribed means of others, the pains would not cease, but increased more and more, I was called, eighteen hours after the first violent attack.

The face of the child was sunken in, entirely altered; the look anxious and disturbed, expressing the greatest anguish; she continually had a rising-up of wind with real vomiting of slimy gall, mixed with particles of excrement. She complained of continued pains below the navel, towards the right side, which were increased by the least motion. From this side upwards I could clearly feel the intestines like thick swelling.

Seeing that this was a colic in consequence of intussusception of a part of the ileus, and perceiving the danger in which the life of the child was, I hastened to promote the peristaltic motion of the intestines at the same time upwards and downwards, thus to effect a separation, and act against the inflammation which might have already taken place. I, therefore, had the child immediately undressed, put into an empty tub, and gave her continually drink. The head and upper part of the body of the child, I had supported by a man, while two other persons were engaged to rub the legs and abdomen with their hands. During all this time I had water continually poured out of a pot over the abdomen and thighs of the patient for half an hour, allowing it always to run out of the tub, so that the child sat all the time in an empty tub. Every quarter of an hour a small, cold injection was given.

The little patient felt after this treatment easier, but the intussusception was not changed, though the

momentary danger was removed. The poor child was trembling all over; I therefore discontinued this treatment, and put her to bed, applying a wet compress over her abdomen and covering her carefully. But before I put her to bed, I gave her another cold injection. After about half an hour, during which time the child got somewhat warm, I renewed the first treatment.

When this had been continued for about fifteen minutes, the patient evacuated, with vehemence, a great number of carrion-like smelling winds, which were immediately followed by lumps of excrements, in which I found wound together ten large mawworms. The child felt, immediately after this evacuation, very much relieved, and the vehement pain and vomiting ceased.

I continued the treatment, as above described, for some five minutes longer after this critical evacuation; then covered her well up in bed, put a bandage on her abdomen, and gave her some thin milk, with the yellow of an egg and some sugar to eat; all of which she kept without vomiting. I then gave her some water to drink, from time to time, and renewed the bandage over the abdomen every half hour, repeating at the same time the application of an injection. Circumstances having changed so much for the better, I had the bandages very seldom renewed during the night.

The next morning I found the little girl entirely well and playing in her bed. I ordered her for some days to get two daily half-baths of 65° F. for three minutes each, and recommended the drinking of a great deal of water.

The child has remained well since that time.

## ATTACKS OF SUFFOCATION,

From which infants suffer most, immediately after birth, during sucking and teething, but seldomer in the latter periods of their childhood, are frequently caused by the accumulation of phlegm in the nose, mouth and throat. These parts, therefore, ought to be, immediately after birth, eleaned with a finger, round which a piece of fine linen is wound. Other causes of these attacks are: continual crying; sudden motions while the child is crying; sucking or eating warm pap. They often appear when the child swallows victuals, or other things of too large a size, &c. We remove these things either up or downwards, by vomiting or pushing down. We push them down by means of a piece of whale bone, on the end of which a small piece of sponge is fastened; and then restore the child to life by pouring cold water over the neek and spine.

Dr. De Meyer relates the following ease:

Julia Stelzig, eight months old, of a lively temperament, full, fat, and healthy, was, in the first week of the period of teething, attacked by a vehement cough, which was after the third day, accompanied by convulsions, which ended in attacks of suffocation. The child grew thinner every day; the attacks became more severe and frequent, and threatened every moment the life of the child.

The afflicted parents of this only child, after it had been pronounced incurable by several drug-practitioners, sought help at last in cold water.

The fever, particularly the heat which preceded the fever-attack, being vehement, I had the child immediately enveloped in a wet sheet and well covered, gave it every two hours an injection of a tea-cup full of cold water, and let it drink water and thin milk. These envelopings were renewed when the sheet got dry, or the heat returned. When an attack of suffocation, with or without coughing and convulsions, or vice versa, ensued, water was poured over the child in the following manner:-The little patient was put in a wide, low, empty tub, in which it was kept and rubbed by two assistants; the third person supported its head with the left hand, and bent it forward to prevent the water from running into the mouth. Thus the contents of a vessel, containing from three to four quarts of water, were poured in a stream from the height of about two feet over the head, neck and back. This procedure was continued till the dreaded attacks ceased. The child was then, wet as it was, put in a dry sheet and put to bed. When the heat returned, the wet sheet was applied; and water was poured over the patient when the other attacks appeared.

After the first affusion the attack of cramps and suffocation decreased in duration and strength; and under this treatment they continued to decrease, till on the fourth day the child was entirely free from them and restored. The teeth had cut through, and cough and convulsions had ceased.

#### DIARRHŒA.

This is a very frequently occurring disease, and originates either in irritation or debility of the digestive organs and impeded perspiration of the skin; or, it is produced by dietetic errors, by the use of sharp, too fat, indigestible food, or the immoderate use of liquor; by eatching cold; by suppression of eruptions and ulcers, and other metastases of diseases to the intestines; by ulcers of the intestines, &c.

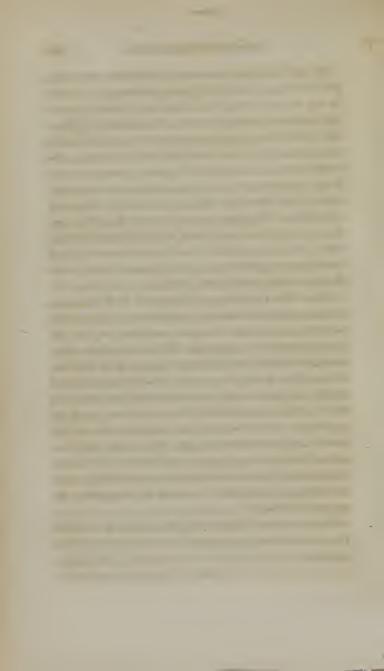
The matter of the excrements may be slimy, bloody, pus-like, watery, &c. The diarrhæa of children may be caused by dietetic improprieties of the nurse, by over-feeding, or by catching cold. In the first case, the diarrhæa is gastric; in the second, catarrhal or rheumatic.

In the first case, if the diarrhoa is of gastric origin, the patient complains of headache, inclination to vomiting, pressure in the region of the stomach, and a pinching pain in the region of the navel. If the child's tongue is furred, or if the forehead feels hot to the touch, the abdomen is painful, and in the beginning, a thin, pap-like stool, with undigested food, will go quickly off; we should then give, every one to two hours, alternately, a half and a whole injection; apply exciting compresses over the abdomen and head, changing them quickly; give as much water as possible to drink, till real vomiting ensues, and keep always a very strict diet, (nothing but a very simple soup,) and in twelve to forty-eight hours the whole disorder will be cured.

In catarrhal and rheumatic diarrhæas, the treatment is alike, because the disease differs only in so far as the fever in catarrhal diarrhæa is more general and vehement, and has a more inflammatory character. The skin is hot and dry, and more inclined to sweat; there is more straining in the stooling; the stools are more slimy, and the pain extends over the whole abdomen; whereas, in rheumatic diarrhæas, there is less fever, no regular course, and frequently little chills. The whole body is covered with gooseflesh; the pori of the skin are cramp-like contracted; the thirst is comparatively little; and the stools, which are more thin and watery, pass frequently with a wandering, tearing pain in the abdomen.

Strict diet; moderate drinking of fresh water in small quantities; warming compresses on the bowels, well-wrung-out, and changed as often as they get dry; repeated envelopings till the desired sweat breaks out and the diarrhæa ceases, with ablution following at from 58° to 65° F., and half injections of water, in which some starch is dissolved, of about 55° F., will soon remove every pain, and cure the diarrhæa. After the health is restored, it is well to wash, for some time longer, the whole abdomen more than once a day with cold water; take every day one sitz-bath of about five minutes, and inject and drink some cold water, in order to strengthen the digestive organs.

The so-called Summer-complaint belongs to this class of diseases, and is easily cured in the above manner.



## APPENDIX.

BRUISES, SCALDS, BURNS, AND OTHER TRIFLING EXTERNAL INFLAMMATIONS,

Are easily managed by hydriatric means. We merely apply compresses of old soft linen, wetted in very cold water, and renew them whenever they begin to get warm; which process is continued till the inflammation is fully subdued.

After we have succeeded in removing the inflammation, we put a soothing and dissolving bandage on the injured part, which consists in a piece of fourfolded and wetted wrung-out fine linen, covered by some thicker dry linen, and renewed when they begin to get dry. In this manner we will always heal such injuries easily and perfectly, so that even not the least mark will remain.

If the injury should produce feverishness, a wash down with water of about 68° F., and repeated, if necessary, will be sufficient to conquer it. The bowels we keep in order by injections of 70° F., and by drinking freely of water.

If in scalds or burns the wound should not so easily heal, it would be advisable to pour water on it out of a pitcher from the height of from two to six feet, and repeat this two or three times a day.

More extensive scalds or burns are of a more serious nature, and require the personal attention of a sensible hydriatric practitioner, who will often be able to save lives, which, under other treatment, will be lost. I may mention here, as a proof, the case of a soap manufacturer, who fell into a vat full of boiling soap, and who, although immediately dragged out of it, was considered incurable; I restored him to health by water-treatment.

# WHITLOW ON THE FINGER AND PHLEGMONOUS INFLAMMATIONS ON THE HAND.

These very painful inflammations, which so often endanger the form and joints of fingers and hand, are easily and speedily cured in the following manner:

The patient takes daily, twice or three times, an elbow-bath of 70° F., each for one hour at a time, and applies to the inflamed parts cooling bandages, renewing them, according to circumstances, every ten to twenty minutes. As soon as, in this manner, the inflammation is conquered, and suppuration begins to ensue, we give the elbow-bath only twenty minutes long, and put on the suppurating part a fourfolded piece of wet, well-wrung-out linen, which we cover carefully and thickly with thick flannel, and renew the linen, as soon as they begin to get dry. We give spare diet and a good deal of water to drink.

#### HYDROPHOBIA.

This has hitherto proved for the drug-practitioner a perfectly incurable disease. There is not on record a single authenticated case of a cure. Surely it is in such cases as these, if in any, that we are not only justified, but even called upon to adopt any new mode of treatment that offers hope of success, even if this hope be but faint, and if there were not one case already cured by it. Priessnitz has restored dogs having the symptoms of this dreadful disease; and I myself, restored a boy who clearly was attacked by it, an account of which I have already given to the public in "Water-cure in America." If we connect with these successful experiments the recommendations of water for the cure of hydrophobia, pressed again and again by the most eminent physicians of all ages, we cannot help wondering, why it has not been repeatedly tried, did we not know the obstinate arrogance of the drug-system and its disciples. I would recommend the following procedure, and beg every friend of humanity not to overlook it disdainfully:

As Preservative after the bite of the dog: Put the patient at once into a deep half-bath of about 65° F.; rub him well and keep him there till a perfect shaking chill pervades him; pack him then in woollen blankets tightly, and let him lie there till he has sweated profusely two to three hours, while he drinks fresh water; after that put him into a half-bath of 68° F., and cool him off; then let him take much exercise, and syringe the wound often with cold water; the wound

should be covered by a wet compress. Repeat this process for about four weeks.

As a cure when the disease has broken out: Put the patient immediately under a douche-bath in a narrow space; keep him under the stream till he is perfectly exhausted and trembles all over in consequence of the whole nervous system being roused to the utmost extent. Then pack him tightly in dry blankets and let him sweat for four hours. He will be able and should drink water as soon as he begins to sweat. This sweat should be washed off in a bath of about 70° F. This sweating is to be repeated daily for from four to six weeks; and whenever the patient shows any signs of a new attack, apply again the douehe, &c. If a douehe cannot be had, put the patient into a bathing-tub, and pour very cold water over him, while some assistants rub him well. This is to be continued till the same chill as above is produced, when the patient is packed as above, &c. The wound must be very frequently syringed with cold water; and when the wound is healed, put a wet compress, well covered with a dry one, on the spot where it was.

Kalispines considers it the best means for preventing and curing hydrophobia, to immerse the bitten individual, with tied hands, into cold water again and again, till he is compelled to swallow some of it, and to throw it up again by vomiting. Although he was aware, long before, that Boerhaave, Van Swieten, Helmot, Mead, and a host of others, had recommended sea-bathing as an excellent remedy against hydrophobia, he was startled by the observation of the following occurrence:

A dog, writhing already in the last stage of hydrophobia, was driven by an immense concourse of people into the sea near Petersburg, and prevented from reaching the shore till his death seemed unavoidable. Next morning, the same dog was found alive on the shore, although so exhausted and emaciated, that he could not move. Kalispines took him along, kept and nursed him till he was perfectly restored. This circumstance caused the editor of the "Petersburger Gesundheits Freund," to treat a peasant, who was bitten by a mad dog, in the same manner, by a continued repetition of the immersions into cold water, which realized his most sanguine expectations.

#### TOOTHACHE,

Will generally yield, if it is not merely a symptom of another disease, to the following treatment:

Take a foot-bath of about 65° F., three to four inches deep, for twenty-five minutes, and rub your feet well, while in it; at the same time take water of the same temperature in your mouth and keep it there till it gets warm, then spit it out, take another similar quantity in your mouth, keep it there as above, and so on. During this time rub the cheek and behind the ears hard with hands dipped repeatedly in cold water.

### MUMPS.

This diseased condition, which attacks generally an individual only once, has its seat in the parotid glands behind the ears, and produces there inflammatory heat, tenderness, pain and swelling. This swelling soon extends and spreads over the neighbouring glands. It often attacks only one side of the head, sometimes both, and not unfrequently changes from one side to the other. It is clearly contagious. There have been cases where the inflammation extended to the glands of the breast, and again where it left the glands and attacked the brain. It is generally accompanied by general slight feverishness, and attended with pain and difficulty in opening the jaw. In drugtreatment the glands often waste and shrivel. Although the region of the parotid glands is not much red, the temperature of the skin is greatly augmented. The treatment is very simple:

We wash the affected part for some minutes with cold water, put a bandage, wetted, and not too much wrung-out, on it; we pack for a sweat at once, which sweat we wash off with tepid water of about 68° F. to 70° F. The bandage must be renewed every hour at least; the neck is to be washed with cold water after the warm bandage is taken off, and before the new one is put on. One good sweat generally suffices; but if the fever should increase, we have to conquer it, as every other hot fever, with repeated wet sheet envelopings and tepid half-baths. It is well to give the patient for some time, every afternoon, a sitz-bath of 65° F. for twenty-five minutes, and keep the bowels regular, if necessary, by repeated injections, and give water freely to drink.

After the disease is removed, wash the neck, particularly as far as it was affected, with cold water, repeatedly, every day for some time.

#### DELIRIUM TREMENS POTATORUM.

This is an evil which an individual contracts only by a great abuse of spirituous liquors; it is principally characterized by disturbances in the functions of the brain and nerves, viz: sleeplessness, delirium, illusions of the senses, frequently connected with trembling of the members of the body, with or without a change of the functions of the blood vessels, with or without fever; it shows a great tendency to collapsus, and can only be removed by critical sleep. It has only lately become a subject of more careful observation. Dr. Roesch finds the nature of the disease in a supercarbonization of the blood, which becomes dark and hardly coagulable; there is a great tendency to melæna, and the whole face, nose, lips, tongue, &c., get bluish.

Dr. Barkhausen considers this disease to be a particular, characterizing disturbance of the intellectual sensories, and of the whole nervous activity in consequence of super-irritation of the brain, produced by a specific cause, the continued abuse of spirituous liquors.

Dr. Voigt, in Leipzig, treated a young man who was attacked by delirium tremens from drinking beer, and Dr. Schlesinger mentions an hysterical lady suffering from the same disease in consequence of her washing herself daily with Eau de Cologne.

Dr. Stookes, who frequently observed the delirium tremens in the Meath Hospital, at Dublin, says:

"That a great many have seen delirium tremens, but that only a few know, that this disease developes

itself under two totally different circumstances. In the one case, a person who is used to take a great deal of spirituous liquors, gets a fever or any other disease; he has to remain in bed, is treated and fed antiphlogistically, and gets now groats and gruel, instead of spirits. He is attacked by delirium tremens, and there appear all the signs of a tremendous excitement of the brain. Another individual, not used to daily drinking, has repeatedly an opportunity to get intoxicated, and is seized by delirium tremens. In the first case, the disease originated in the sudden want of the usual stimulus, and in the second, in the unusual excess. In the two cases, the cause of the disease is clearly different, and it would be folly to treat both alike. Yet it is certain that this fault is frequently committed by men of great authority, who cannot free themselves from the mania of clinging to a system, and from the tendency to look at the names for things, and not at the things themselves. Thus a person is treated according to the symptoms, while the cause and the manner of the origin are unheeded." In the first case, where the delirium was produced by the want of the usual stimulant, stimulants must be given; but in the other, where the person is not a drunkard, but has only committed some momentary excesses, and where the mucous membranes of the stomach are in a high state of irritation, where the brain and the nervous system are wrought into a state of enormous excitement, either in consequence of the absorption of the alcohol, or of the sympathetic influence of the digestion; should we then stimulate more? Would we not thereby necessarily produce

gastritis, enteritis, encephalitis? Would this not be as unreasonable as the former practice, to try to heal a bite of a mad dog by the application of the hair of that same dog?

But what are the hydriatric stimulants applicable in the first case?

We give plenty of cold water to drink, give the the wave-bath, half-bath, and pour cold water over the head and on the spinal column, and continue this till we succeed in producing a refreshing sleep, accompanied with perspiration. Afterwards we treat the patient soothingly by packing in wet sheets, and giving tepid baths, as well as warming bandages on the stomach. In the second case, we have to sooth from the beginning, and therefore prescribe tepid sitz-bath of long duration, injections, cooling bandages on the stomach, rubbing of the extremities with hands dipped in cold water, repeated washings of the head and spinal column with cold water; short packs in wet sheets, followed by a tepid half-bath of three to five minutes.

It cannot be denied that the blood of an alcoholdrinker gets too much carbonized, that it is dark and not coagulable, that its condition is changed, that it is poisoned as with prussic acid, that the drinker suffers from melacna, from disturbances of the mental functions, from emaciation, &c.

Nature cures the delirium tremens, as is generally known, by a long-lasting deep sleep, accompanied by much sweating, by means of which the blood tries to throw out its poisonous ingredients. The use of opium is very injurious, because it augments the pas-

sive congestions to the head, liver, &c., and the increased sickly venosity.

Dr. Bentsch reports the following case:

The patient is a woman of fifty years, and of choleric temperament. She was sickly a good many years. Her former occupation as seamstress had produced obstructions, difficulties in digestion and menstruation. She married in her fortieth year; remained without children; suffered much from pains in the stomach; had much more thirst than appetite for victuals; little sleep; eruptions on the feet, which from time to time threw out a sticky fluid. She suffered from various kinds of headache, and the bowels became very irregular. Menstruation had ceased some years ago.

She began to get very thin, and drank a great deal of beer. This gave rise to domestic difficulties and mental excitement. The heat of summer then brought on the delirium tremens, to which the organism was

long ago predisposed.

The physician did not recognise the disease till it had reached its acme. The patient screamed, sang obscene songs, and threw herself about with such vehemence, that it was astonishin thow such a poor, suffering, weakly person, who could not bear the least noise, could stand it for days and nights together.

Her physician gave our patient finally Morph., with Digital., and prescribed cold compresses on the head, without any success. He then consulted with me about the water-treatment. I found, besides the above mentioned symptoms, the face red, hot; eyes

fixed; the white of the eyes red; the hair entangled; the tongue pretty clean; the skin dry and hot; the pulsation hard and moderately quick; the throb of the heart hardly perceptible; there was some cough; the stomach small and soft; the body much emaciated; there was no stool since the last three days; little urine, which went off without her knowledge. She screamed and raged without interruption; she recognised things only momentarily; she asked for wine and beer.

The indications which should effect the cure, were these: to quiet the general excitement of the nerves and vessels; to support and increase the removal of the sickly accumulated warmth, as well as to decrease its reproduction; to contract the expanded blood with its sickly extended vessels; to decarbonise the blood by introducing oxygen; to derive congestions from single organs; to change the sickly gastric juice; to quench the thirst; to regulate the activity of the belly; to excite stool and urine; to operate upon the nervous system slightly, antiphlogistically dissolving, &c., without weakening, because there was collapsus to be feared.

The first condition of the rational physician is, to cure simply, naturally, pleasantly, quickly, cheaply; the remedial agents ought to be found every where easily.

The coldness, as well as the oxygen, the fluidity for itself, and the mechanical particular effect of the water suited and corresponded perfectly with its aim. The coldness neutralized the sick warmth, diminished the expansion of the blood and its vessels, quieted "

irritated nervous system, regulated the congestions, and the partially stagnated blood-mass. The mechanical influence helped by its shaking as stimulus, and promoted much the solution of stoppages, &c.

The fluidity of water thinned the thickening of the juices; and the acrimony moistened the dry mucous membranes; promoted the secretions and excretions, and supplied their place as derivants and counter-irritant.

The oxygen of the water again imparted to the carbonized blood its natural chemism, which gave a new activity to the whole organism.

But to give all the above mentioned results, the following procedure was necessary:

The patient was undressed, and put into a deep half-bath of cold water; buckets full of water were then thrown over her, while the whole surface was briskly rubbed. The operation was continued till the whole skin became cool, between six and seven minutes. A cold injection and enveloping into a wet well wrung sheet followed. Carefully covered with dry blankets and feather beds, she drank as much water as she possibly could. (She drank in twentyfour hours about four or five quarts of fresh water.) Cooling compresses to the head continually renewed, occupied one person all the while. The sufferer became not quiet at once, but was moderately in delirium, and there were intervals in which she was perfectly calm. After three hours she began to perspire, and asked pitifully, to remove her torture; she was then taken out of the pack, put into a deep halfbath, and poured over and rubbed. Injections were

again given, compresses applied to the head, and water drank freely.

After about two hours, there appeared again some heat and restlessness; the above described procedure was resorted to, and the patient got perfectly quiet. The next morning there were again some symptoms of delirium. Whether the patient had slept during the night or not, I could not ascertain, as the nurses, worn out by the fatigue of the preceding days, had slept all night.

Again the heat and redness of the face increased, and the bowels were not moved, yet the patient recognized every one. Her voice was feeble and hoarse. There were also some signs of dissolution, viz., flowing of blood from the anus, dusty nostrils, putrid smell, changed face, &c.

The same treatment as before, only somewhat milder.

The third day of this treatment, when the patient was quiet and fully conscious, we left off the packing; compresses, ablutions and injections were continued. She remained quietly in her bed, the skin was not hot, the pulsation regular, and the sleep good; but the bowels continued to be constipated, and the appetite miserable.

The enveloping for sweating was about six times applied, but the injections, compresses, &c., very frequently. As perfect consciousness had returned on the fourth day, a more moderate treatment was sufficient.

About one week later, the patient drank freely water, and sometimes milk, but had no appetite; the

hands were puffed up; she had a yellowish colour of the face, was weak, without memory; she could walk a little out of doors.

Two weeks later, the poor sufferer was perfectly restored.

My friend, Dr. F. Fritzshe, reports another case:

I was called, a few years ago in the night, to a gentleman, forty-eight years of age, of whom I knew that he was much addicted to the use of strong liquors. He was much troubled by restlessness, could hardly remain in his house, fancied himself continually surrounded by rats, mice and spiders, and trembled on all parts of his body. His eyes were blood-shot and protruding, his look staring and wild, his face red and swollen, and his pulse full and undulating. I ordered venesection, prescribed calomel, digitalis, Aqua Laurocerasi, and finally opium. Notwithstanding all this, he had remained sleepless for ninety-six hours, became continually weaker, and could not recognise any body. I had to apprehend apoplexy, and took, therefore, refuge to the watertreatment. The patient was put into a tub, kept there by some assistants, while I had a good many buckets of water dashed over him from a considerable height. As soon as he came out of the bath, he was perfectly rational, recognized every body, and fell into a profound critical sleep that lasted twenty hours, out of which he awoke pretty well. He is now a perfectly healthy man.

# CONCLUSION.

My friend, Dr. E. M. Lazarus, the indefatigable, enthusiastic and self-sacrificing friend of humanity, had taken it into his head to consider the preceding book of high importance, and enlarged my preface in his own way, and prevented me to speak of my book in particular, regarding its contents and style. I therefore add here a few observations.

Most of the prefaces are polite or impolite bills of fare, which the host makes for the hungry traveller of the good things he has had, will have, or has not; most of them are, as Richter has it, lauding and lying funeral sermons about the child of his mind, buried in oblivion: that is, the hypocritical humility of the author is the prophet of its fate. But why should I not have written a second preface instead of a conclusion? Richter again answers: "We speak best and most truly and confidentally with our friend at the door, when he leaves, because we had lost the key to the heart, among the compliments at his arrival." People will find fault, I know very well, with the unequal language of this book, its pulsation being sometimes vehement and sometimes weak, according

to circumstances. If arrogance and stupidity make one warm, is it not excusable to fall out with his temper into some strong declamation? The body and the pen are the sounding boards of the soul. I say not, and do not mean its echo. I might have polished the foregoing pages, and these final ones too; but a candle too much snuffed, burns dimly, and a shirt often washed, gets finer, but thinner. And what is our refinement? The naked names of certain things flatter less the passions, than those which serve as nightgowns for dangerous charms; although I acknowledge, it is very wrong to dirty a beautiful carpet with dirty boots.

The reason why I did not quote the books, which I have used in many instances, is simply that I do not want to be like some ladies, who, in order to have their acquaintance with books and intelligence, or their piety admired, put their books with their backs on the window, or load their parlour-tables with them; and besides it would be of little use to any body, for nobody would read the quotations, as certainly nobody would go to California for the sole purpose of seeing a piece of pure gold in the midst of sand and stones.

I did not flatter in these pages, for flattery is like the fig-tree, whose juice is poisonous, although its fruit is pleasant and sweet. Flattery is a shameful sacrifice of honour. And, in Europe at least, it is often the ease, that the people apply to a butcher, or headsman for help in disease, instead of going to a physician.

The blessing of heaven be with this book; may it

do even a small part of the good I wish, and my friends expect it to do, and which in reality it can do; and I shall be very happy.—Dixi!

Yet I cannot conclude these pages, without saying a few words to those, who, without the smallest particle of merit of their own, attack every one whose shoe-strings to touch, they are unworthy. If for instance, any ignorant pretender of hydriatrics in these regions speaks contemptuously of Priessnitz, the discoverer and the fountain head of all hydriatrics, whom he never has even seen, and disrespectfully of me, proud as I am of the honour of having introduced Priessnitz's system into this country; such a person deserves to be put, if he can understand it, to rights. There is no excuse for a fool in the fact, that some eminent men, like Francke, Piutti, Schmitz, Herzog, Johnson and others have made polite suggestions in Priessnitz's views and treatment; for there is a great difference, whether an ass or Hercules throws a lion's skin over his shoulders; the latter has gloriously conquered the king of the woods, whose skin he wears; but the first did certainly not get his royal cloak by his own bravery.

It seems to be quite a general mania with block-heads to struggle against their deserving opponents, by heaping abuse and falsehoods on them; they are like tallow candles which not only illuminate, but also blacken their object. They are like polecats, supplying their want of strength by stench; they protect their unarmed head by their armed back; and conquer their enemy by soiling him.

I, for my own part, have been silent to all the

lying attacks, some fools have made against me; but if one would think on his razor, on his traveling as a member of a musical band, and on his poor wife and children, he left at home in very unhappy circumstances, he in particular ought not to dare to calumniate a man, who in point of station in life as well as in regard to scientific acquirements stands so high above him.

Whenever I hear of such calumnies, I think with dean Swift:

"On me, when dunces are satiric, I take it for a panegyric; Hated by fools, and fools to hate, Be that my motto and my fate."

Dunces cannot blow through both trumpets of fame anything but bad air, which may reach the nose of the nearest neighbour, but not the ear of the public. Neither can they really hurt, for a bad breath blows always over hollow teeth, that cannot bite. Only then the dunce hurts, when he praises, and often benefits when he wants to hurt. I would not even now say a word, if there was not a tendency among the people, as in the Orient, to favour and honour crazy dunces like saints, and take, what they say for inspiration, and thus injure the most sacred cause. For my ownself, I let my works speak, they are living and walking proofs of my pretensions; but that great and good man Priessnitz, shall and must be protected from the dirty venom of such low reptiles as dare to soil his fair and well-deserved fame. In the flood of medical sin, Priessnitz is our redeeming

Noah, nature the saving ark, and water the blessed Ararat for the wrecked and drowning human family. For this purpose, I hereby subjoin a few extracts from letters, written by an eminently accomplished English lady from Graefenberg, to her friends in England, and published in "Chambers's Papers for the People," Vol. VIII.

My dear R,-Are you surprised to see me once more on the wing? "Whither is she now bound?" methinks I hear you say. Well, then, I will tell you in as few words as possible, that I have again set out in search of that almost first of earthly blessingshealth; and that I am going, in pursuit of it, to the once obscure now far-famed hamlet of Graefenberg. "Is it really possible I have a friend so very daft?" I think I hear you now exclaiming: even so, my dear; and faith and hope, moreover, beckon me on; and I trust you will find that I shall have no cause to repent my temerity in thus venturing in my weak state so far from home. But you will add-"It is not the travelling I dread for her; it is that barbarous, that absurd so called 'cure'—the water-system. that makes me tremble." Eh bien, ma chère, nous verrons. If I return from the Esculapius of the Silesian mountains no better, no stronger, no happier a being than when I bade adieu to the shores of England, with its hosts of learned doctors, why, then, I will give you permission to exult over my folly; meantime, do not despair on my account, or allow your mind to be quite closed by prejudice, but try and believe it possible, that I may be able to add my

Now, do not imagine, my dear, that I have taken this step inconsiderately. Health and life are far too precious boons to be trifled with; I have, therefore, used the poor powers God has given me for weighing and judging; I have read much of what has been written on the subject of the water cure, and having also partially tested it in England, and found it do what no medicine could effect, I think I cannot greatly err in going to the fountain head, and carrying it out with prudent vigour. I am sure you will unite with me in praying for a blessing on my proceedings, and that a good result may be granted to my undertaking. . . . . . .

We at length reached Freiwaldau; driving through rows of small white-washed houses; then by larger ones, looking like lodging-houses; and lastly, along a straggling street into a good sized market place, where gents of all descriptions were sitting before the doors, and where the sign of the Graefenberg Hotel pointed us to our temporary quarters. We were ushered into the only room at liberty. It is on the ground-floor, and must of course serve the purpose of sitting-room and dormitory. Another has been promised on the removal of a Russian prince. Singular quarters for the aristocracy of any country....... lost no time in asking to see the HERO of the watersystem, the once peasant, the now far-famed Priess-NITZ; so on his leaving church, the landlord ushered him in, and remained during the short interview as interpreter. I had been anxious to catch a glimpse of

Graefenberg, how much more so, then to gaze on him WHOSE USEFUL AND INTERESTING DISCOVERY HAD TRANS-FORMED A POOR HAMLET INTO A PLACE OF SUCH CELEBRITY! And besides, had I not been sent a thousand miles to undergo the scrutiny of his eye, and then to go through any process his judgment should dictate? Almost my last hope of a renewal of health and strength seemed, under heaven, to hang on what he can do for me. Is it not natural for me, therefore, to feel even more than curiosity regarding him, notwithstanding all the ridicule, I am quite aware, I may have to encounter from the ignorant or prejudiced, or (which weighs with me more) the anxious and affectionate remonstrances of those I love. Well. what did I behold in this ci-devant peasant? I beheld a person rather above the middle height, exceedingly erect, open chested, and broad shouldered, with a countenance in which great self-possession and good SENSE ELENDED WITH AN EXPRESSION OF REMARKABLE SHREWDNESS, PENETRATION, AND DECISION—the small grey eye denoting the former characteristics, the thin, compressed lips the latter. He has sandyish hair, is sunburnt and freckled; and the being pitted with the small-pox, and the having lost by an accident a front tooth, rather detract from his good looks. His smile is very pleasant, and his manners any thing but vulgar. His tone of voice is low, and his manner of speaking rapid, but gentle. Altogether, the impression he left on my mind was most favourable.......The clergyman inquired, if we wanted to have lodgings at Graefenberg. On my replying that I should prefer indifferent accommodation there to the most comfortable that could be had in the town of Freiwaldan, he gave me no hope of obtaining even one room at Graefenberg for some time to come, such numbers having flocked to the hills, so soon as the warm weather commenced. . . . . . . . .

This morning, punctual to her appointment, arrived the Berlinite, who was followed at eleven by the monarch of hydropathy. After giving fixed attention to the little history of my case, he expressed the hope that he could be of much service to me, and promised to order a bath-attendant, to give me a tepid bath, &c. Priessnitz just entered, kissed my hand, and made his exit. When I had put on my bathing garment, I was conducted to the bath-room, where I found my Esculapius standing by a long narrow bath-tub, with about four inches of tepid water in it. He motioned for me to dash water on my face, and then to step in; when seated in it, he splashed water on my feet and legs, while the servant threw it on my back, which she rubbed vigorously; a can of cold water was then thrown in, after which I was motioned to leave the bath, and Priessnitz withdrew.

How Priessnitz is enabled to judge of the power possessed by the patient to bear applications of water by seeing them in a half-bath, I am at a loss to know; some say he notices the contraction of the muscles. Be that as it may, this is the process all go through ere Priessnitz chooses to decide on the nature of the treatment. He gave the attendant numerous directions, which I felt most tantalizing not to comprehend. After a slight rubbing in a dry sheet, the maiden led me to an open window, and taught me to

flap the sheet about me in all directions; this is called an air-bath. In a few minutes, she encircled me with a bandage about a foot in width, and three yards in length, she having first wet in cold water, and then well squeezed out, about as much as would go once round the body; the remainder being dry, was passed over it. When proceeding to put on my accustomed habiliments, one after another was laughingly withdrawn, and I was esteemed dressed, sans corsets, calecons, jupon de laine, &c., a really charming deprivation in such weather as this! A glass of cold water was then handed to me, with an intimation that I was to walk. This was my initiatory process, and very queer did the stockingless legs look to their owner, as she went her first walk along the street without one of the articles of under-clothing she had hitherto deemed indispensable. Thus disencumbered of what it had for many days been a toil to carry, I exceedingly enjoyed my afternoon ramble along pretty walks by the side of the small river running through the town. I thus became reconciled to Freiwaldau, and retired to rest in happier mood. I was ordered to sleep under a single covering, and to have my windows open throughout the night......So you see, I am progressing; but I have still tepid water, so cautious is Priessnitz. I already feel much stronger, and am able to walk farther.....Among many other instances of benefit received from the water-system, I will here only mention two, respecting two ladies I had met when walking with Mrs. \_\_\_\_\_ and whose healthy and truly merry countenances had attracted my notice. The one was Madame

-, who had for seven years suffered all those evils (physical and mental) that usually arise from premature confinement, and other misfortunes akin, without ever having had a living child. She had consulted the first medical men in various countries, but all to no purpose, and was at length persuaded to try the water-system; which has been so successful in restoring health and strength, as to be the means, under God's blessing, of bestowing on her a little being, whom she considers a great treasure, as well as a pledge of happier days to come. The other lady I met was the Countess -; on seeing whom, Mrs. - exclaimed, "Observe that lady, she is a wonderful cure. She was given up by the faculty, nothing more could be done; upon which her husband, who had previously received benefit at Graefenberg, wrote and asked Priessnitz if he thought he could do her any good. Priessnitz sent off immediately Madame B-, a person well skilled in the watercure, to see her, and form some judgment of her state. When she arrived in Vienna, the poor Countess was scarcely sensible, and was plastered all over with ointments and liniments. Madame B--'s first care was to employ a plentiful ablution, and then to have her lifted by two persons into a carriage, which had to proceed at a walking pace. Whenever they came to a stream of water, the careful nurse alighted to wet the poor invalid's bandages, and when they passed a cottage, she procured for her a little bread and butter. When at length they arrived at Freiwaldau, Priessnitz dealt most gently with her, and allowed her to have an airing daily. By degrees

she made progress, and at the end of a year and some months, she got well through a confinement, and is now a stout and remarkable fine looking woman, with the loveliest complexion I ever saw!.... I have again had a visit from Priessnitz, and am ordered, for exercise, to saw wood; so I must set up a saw and block instanter, or at least so soon as I can go on the hill; for this operation is better performed out of doors, and in the town that is not very practicable. I am, also, then to exchange my tepid bath for a cold plunge, though at first I am to allow the latter to succeed the former, and even for a time or two to go back again to the tepid, which many say is a delicious kind of a bath to have. You see How EXTREMELY CAUTIOUS Priessnitz is: and what think you is his remedy for cold feet? (of which I complained.) Doubtless you will say warm stockings, thick shoes, or perhaps friction. No, dear: he ordered me to walk barefooted over wet grass and clover after my morning bath; this, he averred, would be better than taking foot-baths. He then reiterated his orders for wearing no stockings, on which I exhibited my undressed ankles, which provoked a smile from him. I got into a little scrape with the doctor, owing to the impossibility of entering into explanations with my bath attendant. She told Priessnitz that I would add cloak and shawl to my bed clothing, though he had enjoined me strictly to have but one covering; whereas the fact was, I had substituted those articles, because I could manage to tuck them in, while the narrow decker, though much warmer, did little more than stretch across my poor little receptacle. Now, as I rather prided myself on my great obedience and docility, I was somewhat provoked to be charged with contumacy; but there was no help for it, so I drew upon my small stock of philosophy, and bore the charge as meekly as I could. . . . . . .

Those unfortunate mortals, however, whose happiness depends on freecoed walls, gilt panelings, satin draperies, or Brussels carpets, had better not set foot in Graefenberg, as white-washed walls, uncarpeted floors, &c., would too sadly shock their sensitiveness... I see ladies, too, sawing in the wooden balconies attached to the cottages, and become envious.... Those who are not enthusiasts in the water-system, and who have not to make the restoration of health a business, are apt to pine for more variety than they can find among these hills; but to us all is novelty for the present.

When seated at our repast, we viewed, I assure you, our little precincts with as much pride and complacency, as many a fine lady does her newly furnished boudoir, fitted up with all the pomp of fashion. I find it really delightful to be able to wander out, book and stool in hand, in perfect freedom, without even the encumbrance of a bonnet.......Nature! sweet nature! she has charms inexpressible, and capable of producing almost mysterious effect on the spirits and being of her votaries! How often she can rouse from despondency, and create even gladness of heart, when all else fails to soothe!.....I now enjoy my baths exceedingly; my first essay was from the tepid to the cold plunge, and back again to the tepid, which I found very pleasant. After my morning bath, I walk

for twenty minutes barefooted on the dewy grass or clover, as formerly bidden do, and I am sure this operation would excite your risibility. I have also set up a saw, and you might now see me sawing wood out of doors, as if I was working for my livelihood....., who is very kind and attentive to us, stood by our door for some time talking to us in praise of Priessnitz and his system. He is very enthusiastic, and thinks Priessnitz has made one of the greatest discoveries the world has ever known, because it will be the MEANS OF CONFERRING MORE LASTING SER-VICES ON MANKIND THAN ALMOST ANY OTHER. He also descanted on the character of Priessnitz, and declared him to be SINGULARLY DISINTERESTED; one instance of which he gave us, in his having refused to enrich himself at the expense of his poorer neighbours, as he might have done if he had consented to purchase land contiguous to his dwelling, for the purpose of enlarging it, as some of his friends advised. He remarked on this occasion, "The people of Freiwaldau have gone to great expenses in rendering their houses comfortable and commodious, and I will not rob them of the gain they have been anticipating."

"Priessnitz's character," added he, "has always been free from reproach; no one has ever charged him with a vice, or even with a folly, and his patience and good-temper are singularly eminent; he will go through snow to his knees, though perhaps the party who sends for him has only a headache, or some trifling disorder, and he never complained; he also bears persecution admirably, and his attention and diligence are so great, that he

never receives a letter, though even the postage be unpaid, without replying to it."

He farther informs us, that had not Priessnitz's father been blind, the world would have lost the blessing of his discovery, as the son would have been drawn for a soldier, from which he was exempted purely because he used to lead about his aged parent. .........Understanding that there are now persons here from seven-and-twenty different States and nations, and that there are among them Russians, Poles, Americans, Hungarians, Bohemians, a Greek, and a modicum of French and Italians, I was prepared to see a motley crew; but the first appearance of the guests, to an eye accustomed only to behold men under all the restraints imposed by custom or fashion, is more comical than can be conceived. The pen can give a very faint idea of the grotesqueness, the exceeding oddity of the aspect of those who have from whim or freak exaggerated the pleasant orders given at headquarters for emancipation from unnecessary covering or unhealthy restraints! The countenances and complexion of the guests attest their diversity of origin and nation, not the variety of their customs. That is, à la Græfenberg, and is unique! It consists, for the most part, of a checked or striped linen jacket or frock, which is worn for at least three parts of the year by the thorough-going Græfenberger. The pantaloons are of some light material; and the genuine Græfenbergers have them merely tied round the waist with a cord and tassel, thus dispensing with those harness-like articles called braces. Freedom for the muscles, and also for the lungs, is Priessnitz's sensible injunction; cravats and stocks are, therefore, never seen to incommode the neck of the true disciple, and galling, I should think, it must be to resume such symbols of slavery! How ludicrous are some of the tyrant Fashion's requirements! Yet man seems even to exult in his bondage; and there is a species of rivalship as to who can prove his tortured neck to be the most thoroughly captive, and the least able to employ its functions spontaneously. I cannot, however, admire the poor cropped heads of the gentlemen. The closely cut hair may be very convenient to the constant bather, but is certainly far from being ornamental. As to the beard, that grows or is cut, according to fancy, and as I am rather an admirer of a well-trimmed beard, and think nature never intended that man should be entirely shorn of it, I was not at all disposed to find fault with those whose taste or convenience had allowed theirs to become somewhat luxuriant.

The beard of demi-growth (of an inch or two long) was decidedly not picturesque; and coupled with a hatless head and exposed throat, gave sometimes the idea of an escape from Bedlam. Many are stockingless, but this is of course less visible with gentlemen than with ladies. As to the latter, there is at this season of the year no very striking peculiarity in their attire, excepting that the generality wear nature's stockings only. When seen out of doors, they would doubtless shock a Musselman, for rarely either bonnets or caps wear they; and they certainly do not deem it necessary to conceal their features, or mountain bloom, by a veil! In winter, I understand, their

costume is even more picturesque than that of the gentlemen, as they wear then red Wellingtons, which are displayed to full advantage by the tying up of gowns and other habiliments.

But now to the dinner. I left myself seated at the table, expecting its appearance. The viands are raised by pulleys, in a recess adjoining the salle, and a dish or dishes placed to each mess; the guests hand it and help themselves. The appetite is so keen, that all this is done with no little eagerness and rapidity, and the enormous quantity consumed would surprise any one who did not know how all had laboured to earn their meal. This happened to be pork-day; there were no vegetables but stewed prunes, and little hard balls made out of flour, &c.; and these composed the first course. For many years I had not ventured to touch pork, but Priessnitz and the cure enabled one TO DO WONDERS; besides, necessity has no law, and the appetite was most vulgarly keen; so all was hazarded. Creed-rice and prunes formed course the second.

Priessnitz did not enter till dinner was half over. He was in his ordinary gray coat, and came in with the most unpretending manner. I could not help mentally retracing his career, and wondering whether he ever did so. How astonished would he have once been could he have looked through the vista of years, and seen his present position! Who that had seen, among the Silesian mountains a poor, barefooted peasant lad CUT HIS FINGER, would have augured that THAT event was the germ of a discovery destined to be spread through the civilized world; that would transform a little insignificant hamlet into a place of resort

for all nations, and lay the foundation of both fortune and renown for the youth himself? Yet such was the tiny event which first drew Priessnitz's attention to the curative powers of water! Cold water! Four years later, the same poor peasant again made use of his new-found remedy to cure himself of wounds and broken ribs, incurred by a wagon passing over him. His fame soon extended through the little hamlet, and he was led gradually to try his powers of healing, first on animals, and then on the peasantry around him, until at length his doings attracted the attention of the Faculty and the authorities in his neighbourhood, who persecuted him to the very utmost of their power, and drew upon him the inspection of the government. After due inquiry, the Emperor of Austria granted him permission to have an establishment; and from that time to the present, he has been gaining IM-MENSE EXPERIENCE in treating diseases, and making farther discoveries, both in the application of cold water, and in all the other natural means which his exceed-ING POWER OF CLOSE OBSERVATION have led him to adopt for the cure or amelioration of so many of the ills to which flesh is heir. His first paying patient was a Curé at Freiwaldau, who had been a most strenuous opponent both of him and his cure; but being, after a dangerous illness, given up by the Faculty, he (after receiving the last consolations which his religion dictated to a person supposed to be in dying circumstances) sent, as a lingering hope, for the persecuted Priessnitz, and inquired of him if he thought he could do him any good. Priessnitz consented to try; and in a very short space of time the priest was enabled to resume his duties, and did not fail to recant his former vituperations against Priessnitz and the cure, as publicly as he had previously uttered them, namely, from the pulpit itself; and he has ever since remained his most grateful friend and supporter. . . . . .

Priessnitz always remains in his place at the head of one of the tables, in order to give an opportunity for any one to consult him. We have seen the black gentleman from St. Domingo, of whom I had heard so much; by profession he is a teacher of dancing. He has been a perfect martyr to gout for seventeen years—seven of which have been spent in bed, or chiefly so. He is now so much better, that he is the merriest of the merry, and can cut capers as in olden time. He sat at the head of our table. The whole scene was most amusing.

During my first ramble in the woods, I encountered Dr. \_\_\_\_, who has been here some time under Priessnitz, for his own health. He is not one of the enthusiastic admirers of either Priessnitz, or the cure; but admits that much may be done by the use of cold water alone; and that the system, as now carried on here, shows astonishing application and perseverance in the discoverer. He conceives that it needs medical knowledge to carry it fully out; and yet confesses, that no man possessing that advantage would have dared to put in practice the remedies which Priessnitz prescribed for gout, and which have proved so wonderfully efficacious. May not this be the case with other maladies also? Dr. --regretted that the profession generally would not see the good there obviously is in the system; for though it is their duty to watch against empirics of every kind, yet it is but wise, fair and philanthropic, to institute a candid and impartial inquiry into that which has been the means of benefiting thousands—curing some and relieving others—to whom medicine had for years been administered unavailingly. . . . .

The chief agent in Priessnitz's cure is certainly water, cold or tepid water; but he limits himself not to this alone; and thus his system should, I think, rather be termed, "the natural means system." He exercises a much more extensive power over his patients than the mere use of water would give. He makes them break through all the deleterious habits of artificial life, and obliges them to adopt others to a perfectly opposite and beneficial character. He has philosophized on man in his various conditions in society, and his close and keen observations have led him to detect the chief cause of that deterioration from the sound and healthy state of nature, which ultimately produces disorder and disease. And seeing that this arises most frequently from the prejudicial habits acquired from an over-refined and artificial state of society, he strikes at the root of the evil, and forces his patients back to a ruder state of existence -to simple and healthy habits. He notices how generally free from physical evil is the honest (if not overtasked) peasant; and he makes his patients' manner of life in a measure to resemble his; he orders them to live in fresh air, and obliges them to earn their food and rest by labour of body-prescribing at certain periods, (sufficiently apart,) nourishment of the most simple kind-depriving them at the same time of all hurtful and stimulating beverages. All obstacles to returning health being thus removed, and his patients placed in a condition to derive good from medicine, he administers this in portions suited to their diversified states and wants. This remedy, which is administered freely, both externally and internally, is nature's own medicine, pure and fresh from nature's own spring, and is that blessed gift from heaven—cold water!

I have just encountered a young military man, who has been long here, and expresses great faith in the cure, and in Priessnitz's discretion and penetration. He says his disciples only are ridiculous, as they frequently carry things to an extreme, which Priessnitz is far from favouring. You must not imagine there are no grumblers here, for there are many; but I have observed they are generally those who will not exert themselves to obey orders which are in some way irksome to them; and so, as might be expected, they derive little or no benefit, and perhaps also receive small attention from Priessnitz, as he quickly discriminates between those who have strength of purpose to go through difficulties, and those who have either little faith or no resolution; and he has been often heard to remark: "It is useless to give orders to such a one, for I see at a glance he will not obey, or he will not persevere!" . . . . . .

All tell me I must not attempt to leave the place in my present state of crisis, and say it would be extremely dangerous to do so. An anecdote has been related to me of a lady, who, when in full crisis, wanted to go to Vienna. Priessnitz told her that it would be at the risk of her life, and begged her to get

her business transacted by a friend. On her replying, that this was impossible, and go she must, he urged her to carry on the cure at home. In a short time she returned in a dying state, (as was visible to all who saw her,) and die she did. It was then discovered that the important business which called her away was the replacing of a false tooth! She was a fine looking woman, and her vanity cost her her life.

..........The Archduke Franz Carl, heir-apparent to the Austrian Empire, paid a visit to Græfenberg, and said to Priessnitz, taking his hand: "It is happy for mankind that there exists a Priessnitz!"

At a ball given by Priessnitz in honour of the Archduke, the Grand-duchess of Anhalt Coethen introduced to his royal highness all whom she deemed worthy of the honour. When all were assembled, the Archduke, looking around, asked: "Where are the patients?" "All you behold are patients," was the reply; which elicited from him the remark, that it was a most pleasant mode of regaining health, and that he should not desire a better. In the address presented, by the different representatives to the Archduke, it stated, "That it was reserved for the soil of Austria to give birth to the immortal author of a system which can already rank amongst the number of the sciences;" and then again: "We do not know which to admire most, THE RARE GENIUS OF THIS GIFTED MAN, OR THE FIRMNESS AND MODESTY WHICH CHARACTERIZE HIM!"...... ....Priessnitz has received a silver temperance medal from Father Mathew. The advocate of temperance says he looks upon the inventor of the water-system as if he was an old and much-loved friend.

I have just been reading Sir Bulwer Lytton's letter on the water-cure......It appears to be the remedy of all others for a case like his; there being for a time a complete overthrow of those habits which are prejudicial to the health and strength of both mind and body, while others are required, which are equally beneficial to both. Instead of intense and exciting literary occupation, the mind is allowed relaxation and very gentle employment, while the body, in exchange for too much rest, gets an ample supply of healthy out-door exercise. We may suppose, too, that the late hours and hot rooms are exchanged for early hours and abundance of pure air; and if the exciting beverages of wine, tea, or coffee, have been taken, the strengthening and not stimulating draught from nature's spring is substituted. The poor, illused, overstrained mind is blessed with rest, and all the muscles that have been weakened by inaction are again brought into healthful and active play. At the same time, a process is pursued which rectifies any specific disorder, and, discreetly applied, usually either alleviates or removes it. Without the latter, I can, from experience, affirm that alteration in habits, change of scene, and strictest regimen, are all unavailable; where real ailment exists, there must also be employed the medical agency of water. I have heard many make the same assertion; and only a few days since a gentleman was relating to me how he had for years tried all that travelling, regular habits, and strictest regimen could do-all without effect. The disease was carried with him, and only kept somewhat at bay-an enemy always closing the door to comfort, yet not powerful enough to destroy him. This state had endured for years; he heard of Græfenberg, was persuaded to try it, spent one or two years here, and left it a different man. You should have heard him describe his present happy sensations as contrasted with all the oppression and depression he had for so many years experienced. How charming must be the feeling of renewed life and even youth! But few persevere long enough; though their sufferings may have lasted for the space of ten long years, they are impatient if they are not entirely dismissed in as many months. This is unreasonable..... ....Dr. — has kindly acted as interpreter for me with Priessnitz, and he says he never finds Priessnitz unreasonable in his orders, although some of the patients are so in executing them, by doing more than they are bidden ..... has doubtless heard complaints as to the length of time the water-system takes to effect a cure. In some cases it does do so; and more faith and greater perseverance are necessary than unfortunately are often exhibited; and this is one cause of failure, and in those, too, who have perhaps been fruitlessly pursuing some other remedy for years. Tell him from me, that he need only bring with him about a fifth part of the patience he has shown during his ten years of suffering and application to many physicians, and if at the end of that time he is not restored to the world, his friends, and himself, a new man, or has not, at the very least, received every encouragement to persevere in his new course, he will not, at all events, have rendered his condition worse than before.....Some are incurable by this or any

known system; some complaints admit only of alleviation; and some require a self-denial the patient has not strength of mind to exercise-all which are sources of dissatisfaction; besides which, Priessnitz is fallible, and so are other water-doctors. Are the disciples of Allopathy, or Homocopathy, or any other pathy, infallible? I only wish Hydropathy to be candidly examined, and allowed to do all the good of which it is capable.......There will not be a fair trial given of its powers in acute disorders-such as inflammations, fevers, &c., for which, when properly applied, it is the very speediest, as well as safest remedy known.....I wish hydropathic hospitals for the poor could be instituted, situated in healthy situations near large towns; they might be the means of great relief to those whose unhealthy employment had induced sufferings of either a chronic or acute nature... .....I have just been paying a visit to a very agreeable old gentleman, who suffers much from rheumatic gout. His faith and perseverance are astonishing; he tells me he has sometimes water poured a hundred times over his body in the tepid bath. . . .

I only wish Providence may decree me no harder fate than that of spending a winter at Græfenberg—on the hill, I mean, and not sheltered, coward-like, in the valley, or in the town of Freywaldau......Let not those, however, who are devoid of faith in the cure, and of all enthusiasm in the beauties and varieties of nature, come to Græfenberg, for disappointment would inevitably be the result. Hardships of various kinds would, in the estimation of such, outweigh every thing else; a feeling of dissatisfaction would

counteract much of the good that might otherwise have been gained; Priessnitz would be but half obeyed; and the place and system would be evil spoken of.

........We have become acquainted with two nieces of Marshal Blucher, the elder of whom encouraged me to persevere, telling me she had come here two years since, in so bad a state of health, that all said she had come to die. There appeared for some time an aggravation of her complaint, but at length a turn took place, and she grew gradually better, until, at the conclusion of the second year, she became perfectly restored to health. She is staying merely for her sister's sake, who is under Priessnitz, for a spinal attack, but who is already so much better, as to be able to walk twice in a day to Freywaldau. . . . .

The death of an old gentleman threw a gloom over us all. He had douched too long, and had allowed the douche to fall on his stomach—a thing most strictly forbidden; however this may be, he took cold, and for the first day of his illness, neglected to take the prescribed cure, which made the matter worse. He was gouty and asthmatical. . . . .

Mr. ——, our companion, had been at Græfenberg three years, and spoke in high terms of Priessnitz, acknowledging him to be a genius, and praising, among other qualities, his almost unequalled equanimity of temper. . . . . . .

I have felt not so well, and have been ordered for two days not to eat meat, and to take little food of any kind..........Many of the patients who have been long here, say it is common to experience a touch of whatever ailments one has ever been at all

subject to. This, though disagreeable, is perhaps well, as lessons in the cure are thus taken that may hereafter prove useful. . . . . . .

She came to Græfenberg in a deplorable state of health, being unable to walk, or, I believe, even to sit up. She now appears to be quite well. . . .

We have just had a call from an English physician, who says he blesses God that he came to Græfenberg, the cure having done such wonders for him. He has, I hear, written a letter of thanks to Priessnitz....When Priessnitz dismissed this patient as cured, he advised him to take no animal food, saying: "Men stronger than either you or I never touch meat." He advised him, moreover, to seek some little change of air, and go to the hill. He added, "You are now perfectly well, and may leave off all processes; but you have that about you which may cost you your life; you have too much rich blood in your veins." After coming to the mountains, he, in the course of a day or two, lost half a pint of blood from the nose. Such an occurrence Priessnitz had anticipated, and he predicted a return, which took place, and relieved him much. This was better than losing blood by the lancet. Was it not?

—— She has been here before, when a son received great benefit; now she has brought an invalid daughter. She told me she perceived a great alteration in Priessnitz's mode of proceeding with his patients. Formerly, he sweated them very liberally, and scarcely ever employed the abreibung; stockings, too, she said, had only lately been discarded. A gentleman there told her, that were there any less tedious remedy, he would adopt it in preference to

the water-cure; "but medicine," he added, has failed, and what can I or others so situated do?—there is no other mode of cure. All encouraged me to persevere. .....Some say that, like many other doctors, Priessnitz pays most attention to the rich and great. I must, on the contrary, give my testimony to the very reverse of this, and tell you how much pleased I have been with his prompt care of our maiden, who returned exceedingly unwell.

I was charmed to see how quickly the poor girl was relieved. She would certainly have been sent to bed, and would have had much to have undergone under the medicine system......I think I have not yet mentioned one of the most striking and interesting cases of cure which our own eyes have witnessed; it is that of an engaging little girl of nine years of age, who was brought here two years ago for a white swelling in her knee, which has baffled the skill of some of the first medical men in her own country. Her young and interesting mother was almost at the point of despair at seeing the increase of disease and decrease of strength in her child, when she happened to hear the zealous advocate of the water-cure, (Captain Claridge,) lecture on the subject......It was fortunate for her that Priessnitz should be the man of feeling, discernment and delicacy which he really is, for he immediately felt great interest in both mother and daughter, and became the kind friend, as well as medical adviser.........When Priessnitz was convinced that the complaint was entirely subdued, he advised her to be taken to the celebrated surgeon, Diefenbach, of Berlin, who had been the inventor of the very operation he wished her to undergo. No less than seven cuts were made under the knee, in order to liberate that joint, which had become immovably bent.......When she returned to Graefenberg, she was enabled to put her foot on the ground.....Her interesting parent is much attached to Priessnitz, and, as you may suppose, is deeply grateful too. . . . . .

I have heard from a physician of the remedy given him for violent palpitation of the heart. Priessnitz was sent for, who immediately ordered a cold footbath......He was soon much relieved: umshlags were placed round the body, and over the region of the heart. When he had a similar seizure at Geneva, twenty-two ounces of blood had been abstracted, which had so reduced him, that a dropsical affection ensued in his legs. He is also eminently satisfied ..... ....It is my wish to remain here as long as Priessnitz shall consider it necessary to do so;.....she says that, from long experience, it is her conviction that the patients of Priessnitz should, if possible, stay the full time he prescribes, and that if they do not, they will infallibly repent. I met the gentleman whose case I also alluded to in my letter, who descanted largely on the astonishing penetration evinced by our mountain doctor, as well as on his many other excellent qualities. He told us he himself had come with palpitation of the heart, determination of blood to the head, and pain in his side, and had not strength to walk above half a mile. His sight, he declares, has been so much improved, that he can now see without spectacles. I remarked, he would feel regret at leaving Graefenberg. "Oh, indeed I shall, and I shall have many pleasant associations with a place where I have been disencumbered of so many obstructions of the wheel of life?" . . . . . .

I have just heard an anecdote which I will relate. to show how some of the false reports regarding Priessnitz get abroad. A German gentleman told us he had been requested to interpret for an Englishman, who, having no less than thirty-six boils, felt very ravenous, and was anxious Priessnitz should allow him to gratify his appetite, which previously he had been forbidden to do. "You may appease your hunger, but be moderate," was the reply; which our countryman declared to all his companions was permission to stuff himself as much as he liked. . . . In the account of her child's recovery, I was much interested.....He had been subject to croup, for which he had been constantly leeched, &c., and at length was confined in a room with twenty degrees of heat, Reaumur, [about 75° F.,] for four months, till he became quite a skeleton; four months' diligent perseverance in the water-cure brought him greatly round, and restored the spine, which had become curved. She had complained to Priessnitz of the draughts. He assured her a draught was good; if there was anything amiss in the system, it brought it out, if not, 

When you shall have taken time to judge for yourself, I think you will agree with me, that the watersystem is not the mere thing of a day, but that thousands yet unborn will grant (as many do now) that, under a kind Providence, they will owe renewed power and restored happiness to the genius and perse-

verance of a Silesian peasant. You will see, too, that though Priessnitz is now an independent man as to property, yet he is still as much interested as ever in perfecting his system, and rendering it efficacious; and you will hear from those who are now visiting his establishment, after the lapse of years, how clearly they perceive a considerable difference in his modes of treatment. A system like this, which has been built up by degrees, must surely be susceptible of still farther improvement, either from Priessnitz himself, or others.

I am not afraid of your thinking I have drawn too flattering a portrait of the hero of Graefenberg, for I would not assert that he is infallible in judgment, and perfect in character; but I would say that, from all I have heard or witnessed, I believe him to possess more than ordinary superiority in both. You will perceive too, I think, that both friends and foes have been the means of injuring the system in the estimation of those who have not had an opportunity of forming their own judgment. . . . . . . . .

A first rate medical writer of the present day, alludes to the ingenious modes in which Priessnitz has modified his applications of water, having, he says, his stimulant, his sedative, his tonic, his reducing agent, his purgative, his astringent, his febrifuge, his counter-irritant and so forth. Now if this be so, as it undoubtedly is, can all these various modes of treatment be understood in a few days? And yet many medical men have come here, stayed a week, and then fancied they understood the system, and have

gone home either to practice, or to ridicule it. Is this fair? . . . . . . .

You will be pleased to hear that all praise my improved looks, and wonder how I can have acquired a pair of arms as robust and vulgar, as those of a milk-maid.

How little could your friend once have looked forward to a position like this! joining in games (like blind-man's buff, and cat and mouse) with the young and gay! In my days of languishing and despair, a vision of the future like this, would have seemed too bright for me—in too strong contrast to the then dark present.....We have had a grand gala here in honour of Priessnitz, who has had a gold medal presented to him by the governor of Silesia, and sent by the emperor for the purpose. It is the second order of merit.

It is said, however, that Priessnitz hates scenes, and shrinks from exhibitions and notoriety. . . .

Priessnitz called to say adieu, and to desire to hear from me; and I walked up to his house to take leave of his wife, whom I found busy in her kitchen like a good housewife, looking neat and nice as usual.





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